



STIC Search Report

EIC 1700

STIC Database Tracking Number: 164845

TO: Amanda Walke
Location: REM 9D64
Art Unit : 1752
September 23, 2005

Case Serial Number: 10/820605

From: Usha Shrestha
Location: EIC 1700
REMSSEN 4B28
Phone: 571/272-3519
usha.shrestha@uspto.gov

Search Notes

The Claim 1 has shown that all the monomers are attached together to form one polymer and specification also mentioned reacting them together to make the final product, but the components used to make the polymer are indexed differently in CAS registry file than what Claim 1 reads. Since, the polymers are indexed as its monomer in CAS registry file, so I had to use the registry numbers and also the component registry numbers listed on applicant's publication for this search.



STIC Search Results Feedback Form

EIC17000

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Kathleen Fuller, EIC 1700 Team Leader
571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form

- I am an examiner in Workgroup: Example: 1713
➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

- Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to EIC1700 REMSEN 4B28



SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Amanda Walker Examiner #: 75063 Date: 9/6/05
 Art Unit: 1752 Phone Number 301-2-1337 Serial Number: 10/820605
 Mail Box and Bldg/Room Location: PEM 4D24 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

 Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Bio Sheet Attached

SCIENTIFIC REFERENCE BR
 Sci & Tech Inf. Cntr

Inventors (please provide full names):

CEP REU

Earliest Priority Filing Date:

Pat. & T.M. Office

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search for a phenolic resin comprising units of formula I, II, AND III.
 All formulas appear on claim one and are attached. Thank you.

STAFF USE ONLY

Type of Search

Vendors and cost where applicable

Searcher: <u>W/L</u>	NA Sequence (#) _____	STN <u>8274.01</u>
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit _____
Date Searcher Picked Up: <u>9/22/05</u>	Bibliographic _____	Dr.Link _____
Date Completed: <u>9/23/05</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>200</u>	Fulltext <u>X</u>	Sequence Systems _____
Clerical Prep Time: <u>30</u>	Patent Family _____	WWW/Internet _____
Online Time: <u>150</u>	Other _____	Other (specify) _____

GAU: 1752

10/820605
Classification: 430/270.100
Status: 30 - DOCKETED NEW CASE - READY FOR EXAMINATION
Title: COLOR-DEVELOPING AGENT RESIN COMPOSITION, EMULSION THEREOF AND METHOD FOR PREPARING THE SAME

Examiner: WALKER, AMANDA
Inventor: LIU, ZONGLAI, et al

Bib Data report

Application Title: COLOR-DEVELOPING AGENT RESIN COMPOSITION, EMULSION THEREOF AND METHOD FOR PREPARING THE SAME

Application Num: ☐ (in phx) 10/820605 **Filing Date:** 04/08/2004 **Effective Filing:** 04/08/2004
(Location History) (Foreign/Continuity Data)

Status: 30/DOCKETED NEW CASE - READY FOR EXAMINATION **Status Date:** 07/08/2005

Patent Number: Not Issued **Issue Date:** N/A **Date of Abandonment:** N/A
Confirmation Number: 8191 **PALM Location:**

Examiner: 75663 WALKER, AMANDA (Assignment Data) **Group Art Unit:** 1752 **Class/Subclass:** 430/270.100

State or Country: CHINA **Sheets/Drawing:** 0 **Total Claims:** 24 **Independent Claims:** 3

Inventors:

Last name, First name: **City:** **Country or State:**

LIU, ZONGLAI XIN XIANG CITY CHINA

GUO, CHUNXUAN XIN XIANG CITY CHINA

ZHANG, WEI XIN XIANG CITY CHINA

LIU, YUZHU XIN XIANG CITY CHINA

GAU: 1752

10/820605
Classification: 430/270.100
Status: 30 - DOCKETED NEW CASE - READY FOR EXAMINATION
Title: COLOR-DEVELOPING AGENT RESIN COMPOSITION, EMULSION THEREOF AND METHOD FOR PREPARING THE SAME

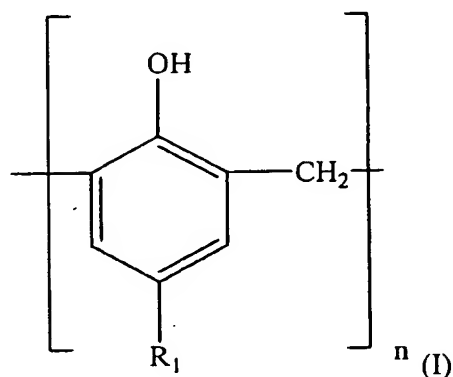
Examiner: WALKER, AMANDA
Inventor: LIU, ZONGLAI, et al

Bib Data report

Attorneys: <u>ALL</u> Attorney Docket No: <u>9363-4</u>		
Interference No:	Lost Case: No	Unmatched Petition: No
		L&R Code: 1

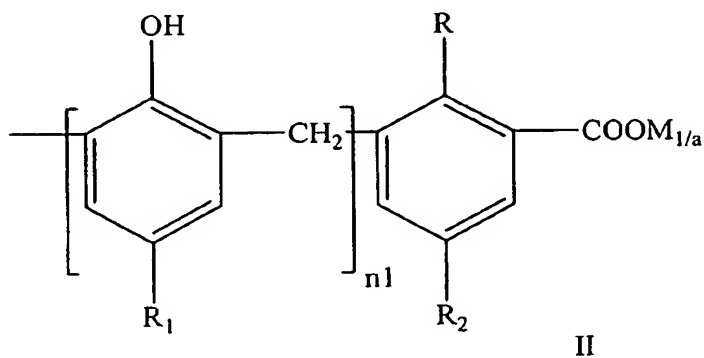
In the Claims:

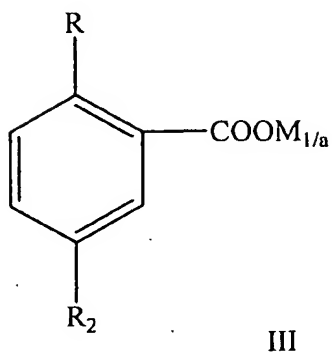
1. (Previously Presented) A color-developing agent resin composition comprising:
 Component 1: a phenolic resin comprising formula I



wherein n is an integer from 1 to 100; and

Component 2: a blend of graft copolymers of a phenolic resin and a multivalent metal salt polymer of a substituted aryl carboxylic acid, wherein at least a portion of said graft copolymers comprise formulas II and III





wherein

R is C_1 - C_4 linear alkyl, hydroxy or halogen;

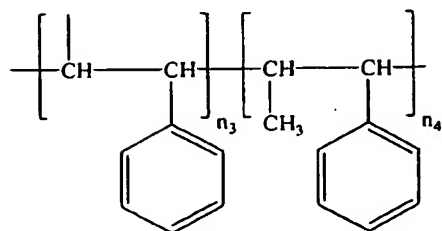
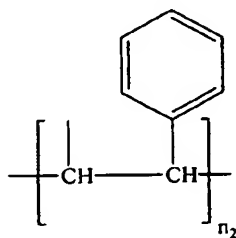
R_1 is individually C_1 - C_{12} linear or branched alkyl, C_1 - C_{12} halohydrocarbyl, C_6 - C_{12} aryl, C_7 - C_{12} aralkyl;

$n_1 = 1-2$

M is a multivalent metal ion;

a represents the valence of M ; and

R_2 is



wherein n_2 is an integer from 1–100; n_3 is an integer from 1–100; and n_4 is an integer from 1–100.

2. (Previously Presented) The color-developing agent resin composition of claim 1, wherein the content of the component 1 comprises about 5–50 % by weight, and component 2 comprises about 95–50 % by weight of the color-developing agent resin composition.

3. (Previously Presented) The color-developing agent resin composition of claim 1, wherein the content of the component 1 comprises about 10–30 % by weight, and the content of the component 2 comprises about 90–70 % by weight of the color-developing agent resin composition.

4. (Previously Presented) A color-developing agent resin emulsion comprising:
- (1) the color-developing agent resin composition of claim 1; and
 - (2) an emulsifying agent.

5. (Previously Presented) The color-developing agent resin emulsion of claim 4, wherein the emulsifying agent is selected from the group consisting of a surfactant, a modified starch and a polyvinyl alcohol.

6. (Currently Amended) A method for preparing the color-developing agent resin composition of claim 1 comprising:

- (1) synthesizing the polymer of a substituted aryl carboxylic acid and an alkenyl benzene in the presence of a catalyst in an inert solvent by using a substituted aryl carboxylic acid or ester having a general formula (IV) and an alkenyl benzene as feedstocks, and reacting the polymer with a multivalent metal ion to form a multivalent metal salt polymer of substituted aryl carboxylic acid as an intermediate;

=> fil reg

FILE 'REGISTRY' ENTERED AT 11:19:33 ON 23 SEP 2005

=> d his

FILE 'HCAPLUS' ENTERED AT 09:55:20 ON 23 SEP 2005

L1 1 S US20050095526/PN
 SEL RN

FILE 'REGISTRY' ENTERED AT 09:55:44 ON 23 SEP 2005

L2 12 S E1-E12
L3 1 S 69-72-7/RN
L4 1 S 26984-25-8/RN
L5 2 S L3 OR L4
L6 1 S 9003-53-6/RN
L7 1 S 25988-52-7/RN
L8 1 S 28552-25-2/RN
L9 1 S 153175-40-7/RN
L10 1 S 851190-85-7/RN
L11 1 S 851190-86-8/RN
L12 1 S 851190-87-9/RN
L13 1 S 851218-91-2/RN
L14 8 S L6-L13
L15 1 S 9052-98-6/RN
L16 1 S 25820-85-3/RN
L17 2 S L15-L16

FILE 'HCAPLUS' ENTERED AT 10:03:53 ON 23 SEP 2005

L18 24978 S L5
L19 106475 S L14
L20 463 S L17
L21 2 S L18 AND L19 AND L20
L22 1 S L1 AND L21

FILE 'STNGUIDE' ENTERED AT 10:05:04 ON 23 SEP 2005

FILE 'HCAPLUS' ENTERED AT 10:06:46 ON 23 SEP 2005

L23 694 S L19(L) PHENOL?
L24 1 S L23 AND L18
L25 4227 S L19 AND PHENOL?
L26 27 S L25 AND L18
L27 7 S L26 AND PHOTO?/SC,SX
L28 9 S L21 OR L24 OR L27

FILE 'REGISTRY' ENTERED AT 10:12:02 ON 23 SEP 2005

FILE 'STNGUIDE' ENTERED AT 10:18:45 ON 23 SEP 2005

FILE 'REGISTRY' ENTERED AT 10:21:38 ON 23 SEP 2005

L29 2181 S 69-72-7/CRN
L30 26098 S 50-00-0/CRN
L31 70987 S 100-42-5/CRN
L32 56 S 637-50-3/CRN
L33 7 S 1515-78-2/CRN
L34 4 S 824-90-8/CRN
L35 71042 S L31-L34
L36 306 S 92-69-3/CRN
L37 123 S 27178-34-3/CRN
L38 429 S L36-L37
L39 0 S L38 AND L35 AND L30 AND L29

FILE 'HCAPLUS' ENTERED AT 10:30:03 ON 23 SEP 2005

L40 7528 S L19 AND ?PHENOL?
 L41 31 S L40 AND L18
 L42 4 S L41 NOT L26
 L43 0 S L42 AND PHOTO?
 L44 13 S L28 OR L42 OR L43
 L45 9619 S L29
 L46 82217 S L30
 L47 275385 S L35
 L48 963 S L38
 L49 2 S L45 AND L46 AND L47 AND L48
 L50 1 S L21 AND L49
 L51 24122 S L47 AND ?PHENOL?
 L52 20 S L51 AND L45 AND L46
 L53 6 S L52 AND PHOTO?
 L54 7 S L52 AND PHOTO?/SC,SX
 L55 9 S L53 OR L54
 L56 21 S L55 OR L44

FILE 'REGISTRY' ENTERED AT 10:52:53 ON 23 SEP 2005

L57 0 S L29 AND L30 AND L35

FILE 'REGISTRY' ENTERED AT 11:19:33 ON 23 SEP 2005

=> d que 156

L3 1 SEA FILE=REGISTRY ABB=ON PLU=ON 69-72-7/RN
 L4 1 SEA FILE=REGISTRY ABB=ON PLU=ON 26984-25-8/RN
 L5 2 SEA FILE=REGISTRY ABB=ON PLU=ON L3 OR L4
 L6 1 SEA FILE=REGISTRY ABB=ON PLU=ON 9003-53-6/RN
 L7 1 SEA FILE=REGISTRY ABB=ON PLU=ON 25988-52-7/RN
 L8 1 SEA FILE=REGISTRY ABB=ON PLU=ON 28552-25-2/RN
 L9 1 SEA FILE=REGISTRY ABB=ON PLU=ON 153175-40-7/RN
 L10 1 SEA FILE=REGISTRY ABB=ON PLU=ON 851190-85-7/RN
 L11 1 SEA FILE=REGISTRY ABB=ON PLU=ON 851190-86-8/RN
 L12 1 SEA FILE=REGISTRY ABB=ON PLU=ON 851190-87-9/RN
 L13 1 SEA FILE=REGISTRY ABB=ON PLU=ON 851218-91-2/RN
 L14 8 SEA FILE=REGISTRY ABB=ON PLU=ON (L6 OR L7 OR L8 OR
 L9 OR L10 OR L11 OR L12 OR L13)
 L15 1 SEA FILE=REGISTRY ABB=ON PLU=ON 9052-98-6/RN
 L16 1 SEA FILE=REGISTRY ABB=ON PLU=ON 25820-85-3/RN
 L17 2 SEA FILE=REGISTRY ABB=ON PLU=ON (L15 OR L16)
 L18 24978 SEA FILE=HCAPLUS ABB=ON PLU=ON L5
 L19 106475 SEA FILE=HCAPLUS ABB=ON PLU=ON L14
 L20 463 SEA FILE=HCAPLUS ABB=ON PLU=ON L17
 L21 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L19 AND L20
 L23 694 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 (L) PHENOL?
 L24 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 AND L18
 L25 4227 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 AND PHENOL?
 L26 27 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 AND L18
 L27 7 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 AND PHOTO?/SC,SX
 L28 9 SEA FILE=HCAPLUS ABB=ON PLU=ON L21 OR L24 OR L27
 L29 2181 SEA FILE=REGISTRY ABB=ON PLU=ON 69-72-7/CRN
 L30 26098 SEA FILE=REGISTRY ABB=ON PLU=ON 50-00-0/CRN
 L31 70987 SEA FILE=REGISTRY ABB=ON PLU=ON 100-42-5/CRN
 L32 56 SEA FILE=REGISTRY ABB=ON PLU=ON 637-50-3/CRN
 L33 7 SEA FILE=REGISTRY ABB=ON PLU=ON 1515-78-2/CRN
 L34 4 SEA FILE=REGISTRY ABB=ON PLU=ON 824-90-8/CRN
 L35 71042 SEA FILE=REGISTRY ABB=ON PLU=ON (L31 OR L32 OR L33
 OR L34)

L40 7528 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 AND ?PHENOL?
 L41 31 SEA FILE=HCAPLUS ABB=ON PLU=ON L40 AND L18
 L42 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L41 NOT L26
 L43 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L42 AND PHOTO?
 L44 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L28 OR L42 OR L43
 L45 9619 SEA FILE=HCAPLUS ABB=ON PLU=ON L29
 L46 82217 SEA FILE=HCAPLUS ABB=ON PLU=ON L30
 L47 275385 SEA FILE=HCAPLUS ABB=ON PLU=ON L35
 L51 24122 SEA FILE=HCAPLUS ABB=ON PLU=ON L47 AND ?PHENOL?
 L52 20 SEA FILE=HCAPLUS ABB=ON PLU=ON L51 AND L45 AND L46
 L53 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND PHOTO?
 L54 7 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND PHOTO?/SC,SX
 L55 9 SEA FILE=HCAPLUS ABB=ON PLU=ON L53 OR L54
 L56 21 SEA FILE=HCAPLUS ABB=ON PLU=ON L55 OR L44

=> fil hcap

FILE 'HCAPLUS' ENTERED AT 11:20:00 ON 23 SEP 2005

=> d l56 1-21 ibib abs hitstr hitind

L56 ANSWER 1 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:394652 HCAPLUS

DOCUMENT NUMBER: 142:454343

TITLE: Color-developing agent resin composition,
emulsion thereof, and method for preparing the
same

INVENTOR(S): Liu, Zonglai; Guo, Chunxuan; Zhang, Wei; Liu,
Yuzhu

PATENT ASSIGNEE(S): Peop. Rep. China

SOURCE: U.S. Pat. Appl. Publ., 9 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
US 2005095526	A1	20050505	US 2004-820605	2004 0408
WO 2005040242	A1	20050506	WO 2003-CN916	2003 1029

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,
 CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI,
 GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
 KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
 MN, MW, MX, NZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU,
 SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
 UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
 DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL,
 PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
 GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

WO 2003-CN916

A

2003
1029

GI

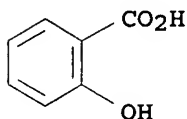
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT
*

AB The present invention relates to a color-developing agent resin composition, which contains: (1) a **phenolic** resin represented by formula I ($n = 1-100$; $R_1 = C_1-12$ alkyl, halohydrocarbyl, C_6-12 aryl, C_7-12 aralkyl); and (2) a blend of graft copolymers of a **phenolic** resin and a multivalent metal salt polymer of a substituted aryl carboxylic acid, said graft copolymers are represented by II and III ($R = C_1-4$ alkyl, hydroxy, halogen; $n_1 = 1-2$; $M =$ metal ion; $R_2 = IV, V$). The present invention further relates to a resin emulsion containing the color-developing agent resin composition and a method for preparing the same. The color-developing agent resin composition and the color-developing agent resin emulsion of the present invention are used for no-carbon copying paper as special resin color-developing agents. They have advantages of not only fast developing at a low temperature and bright colors, but also heavy developing strength and good light-aging resistance of writing, and furthermore, their coatings are not easy to turn yellow when they are hold in the air, and the like.

IT 69-72-7DP, Salicylic acid, reaction product
9003-53-6DP, Poly(Vinylbenzene), reaction product with salicylic acid 9052-98-6DP, tert-Butylphenol-formaldehyde copolymer, reaction product with salicylic acid 25820-85-3DP, p-Phenylphenol-formaldehyde copolymer, reaction product with salicylic acid 25988-52-7DP, reaction product with salicylic acid 26984-25-8DP, Formaldehyde-salicylic acid copolymer, reaction product with 4-chlorophenol. 28552-25-2DP, reaction product with salicylic acid 153175-40-7DP, reaction product with salicylic acid 851190-85-7DP, reaction product with p-phenylphenol 851190-86-8DP, reaction product with p-Chlorophenol 851190-87-9DP, reaction product with sec-octylphenol 851218-91-2DP, reaction product with tert-Butylphenol
(color-developing agent resin composition for emulsion)

RN 69-72-7 HCAPLUS

CN Benzoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

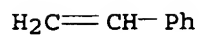


RN 9003-53-6 HCAPLUS

CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5
CMF C8 H8



RN 9052-98-6 HCAPLUS
CN Formaldehyde, polymer with (1,1-dimethylethyl)phenol (9CI) (CA INDEX NAME)

CM 1

CRN 27178-34-3
CMF C10 H14 O
CCI IDS

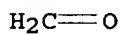


D1-OH

D1-Bu-t

CM 2

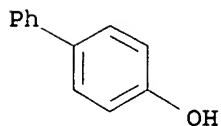
CRN 50-00-0
CMF C H2 O



RN 25820-85-3 HCAPLUS
CN Formaldehyde, polymer with [1,1'-biphenyl]-4-ol (9CI) (CA INDEX NAME)

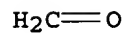
CM 1

CRN 92-69-3
CMF C12 H10 O



CM 2

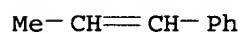
CRN 50-00-0
CMF C H2 O



RN 25988-52-7 HCAPLUS
CN Benzene, 1-propenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

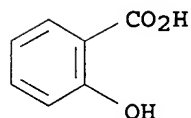
CRN 637-50-3
CMF C9 H10



RN 26984-25-8 HCAPLUS
CN Benzoic acid, 2-hydroxy-, polymer with formaldehyde (9CI) (CA INDEX NAME)

CM 1

CRN 69-72-7
CMF C7 H6 O3



CM 2

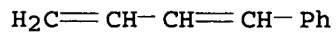
CRN 50-00-0
CMF C H2 O



RN 28552-25-2 HCAPLUS
CN Benzene, 1,3-butadienyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 1515-78-2
CMF C10 H10



RN 153175-40-7 HCAPLUS
CN Benzene, 1-butenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 824-90-8
CMF C10 H12

Et-CH=CH-Ph

RN 851190-85-7 HCAPLUS
CN Formaldehyde, polymer with 1-butenylbenzene, graft (9CI) (CA
INDEX NAME)

CM 1

CRN 824-90-8
CMF C10 H12

Et-CH=CH-Ph

CM 2

CRN 50-00-0
CMF C H2 O

H₂C=O

RN 851190-86-8 HCAPLUS
CN Formaldehyde, polymer with 1,3-butadienylbenzene, graft (9CI) (CA
INDEX NAME)

CM 1

CRN 1515-78-2
CMF C10 H10

H₂C=CH-CH=CH-Ph

CM 2

CRN 50-00-0
CMF C H2 O

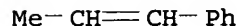
H₂C=O

RN 851190-87-9 HCAPLUS
CN Formaldehyde, polymer with 1-propenylbenzene, graft (9CI) (CA
INDEX NAME)

CM 1

CRN 637-50-3

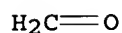
CMF C9 H10



CM 2

CRN 50-00-0

CMF C H2 O



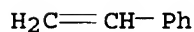
RN 851218-91-2 HCAPLUS

CN Formaldehyde, polymer with ethenylbenzene, graft (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5

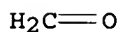
CMF C8 H8



CM 2

CRN 50-00-0

CMF C H2 O



IC ICM G03C005-16

INCL 430224000

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38

IT Phenolic resins, uses

(color-developing agent resin composition for emulsion)

IT 69-72-7DP, Salicylic acid, reaction product
9003-53-6DP, Poly(Vinylbenzene), reaction product with
salicylic acid 9052-98-6DP, tert-Butylphenol
-formaldehyde copolymer, reaction product with salicylic acid
25820-85-3DP, p-Phenylphenol-formaldehyde
copolymer, reaction product with salicylic acid
25988-52-7DP, reaction product with salicylic acid
26984-25-8DP, Formaldehyde-salicylic acid copolymer,
reaction product with 4-chlorophenol
26984-25-8DP, Formaldehyde-salicylic acid copolymer,
reaction product with sec-octylphenol

28552-25-2DP, reaction product with salicylic acid
 153175-40-7DP, reaction product with salicylic acid
 851190-85-7DP, reaction product with p-phenylphenol
 851190-86-8DP, reaction product with p-Chlorophenol
 851190-87-9DP, reaction product with sec-octylphenol
 851218-91-2DP, reaction product with tert-Butylphenol
 (color-developing agent resin composition for emulsion)

L56 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:18114 HCAPLUS

DOCUMENT NUMBER: 140:67710

TITLE: Particles and device for displaying and erasing images through flight or movement of particles by Coulomb force or the like

INVENTOR(S): Yakushiji, Manabu; Takagi, Koji; Murata, Kazuya; Nihei, Norio; Kitano, Hajime; Masuda, Yoshitomo

PATENT ASSIGNEE(S): Bridgestone Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 2004004469	A2	20040108	JP 2002-309061	2002 1023
PRIORITY APPLN. INFO.: JP 2002-102250				A 2002 0404

AB The particles comprise (A) base particles and (B) smaller particles deposited on A by surface treatment of B with solns. of charge-controlling agents, preferably, ≥ 1 of compds. selected from nigrosines, resin acid-modified azine compds., quaternary ammonium salts, salicylic acid-based metal complexes, phenolic compound condensates, metal-containing azo compds., and triphenylmethane derivs. A and B may comprise polymers and metal oxides, resp. The particles will be sealed in a gap of a pair of substrates (at least one of the substrates are transparent), applied with elec. field from 2 types of electrodes with different elec. potentials and to make the particles move and/or fly to form/erase images. The display apparatus provides stable images with sufficient contrast.

IT 9003-53-6, MW 1

(black particles; oxide particle-deposited resin particles for displaying and erasing images through flight or movement by Coulomb force, etc.)

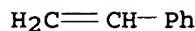
RN 9003-53-6 HCAPLUS

CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

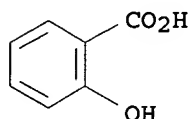
CM 1

CRN 100-42-5

CMF C8 H8



IT 69-72-7D, Salicylic acid, compds., metal complexes
 (for surface treatment of oxide particles; oxide
 particle-deposited resin particles for displaying and erasing
 images through flight or movement by Coulomb force, etc.)
 RN 69-72-7 HCAPLUS
 CN Benzoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)



IC ICM G02F001-167
 ICS C08J003-12
 CC 74-13 (Radiation Chemistry, Photochemistry, and
 Photographic and Other Reprographic Processes)
 IT 9003-53-6, MW 1
 (black particles; oxide particle-deposited resin particles for
 displaying and erasing images through flight or movement by
 Coulomb force, etc.)
 IT 69-72-7D, Salicylic acid, compds., metal complexes
 108-95-2D, Phenol, derivs., condensates 519-73-3D,
 Triphenylmethane, derivs.
 (for surface treatment of oxide particles; oxide
 particle-deposited resin particles for displaying and erasing
 images through flight or movement by Coulomb force, etc.)
 L56 ANSWER 3 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2000:227440 HCAPLUS
 DOCUMENT NUMBER: 132:261672
 TITLE: Weed growth-inhibiting formulations containing
 nonselective organophosphorus herbicides
 INVENTOR(S): Horibe, Yoshimichi; Amagasa, Tadashi; Sato,
 Kazuo; Aoki, Atsushi
 PATENT ASSIGNEE(S): Sankyo Company, Ltd., Japan
 SOURCE: PCT Int. Appl., 45 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000018236	A1	20000406	WO 1999-JP5174	1999 0922
W: AU, BR, CA, CN, KR, RU, UA, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9957577	A1	20000417	AU 1999-57577	1999

JP 2000159615 A2 20000613 JP 1999-267910 0922
 1999
 0922
 PRIORITY APPLN. INFO.: JP 1998-271696 A
 1998
 0925
 WO 1999-JP5174 W
 1999
 0922

OTHER SOURCE(S): MARPAT 132:261672

AB Agrochem. compns. that can be utilized to control the growth of weeds without killing the plants (e.g. on slopes or ridges) contain a first ingredient selected from the group consisting of glyphosate, etc.; a second ingredient selected from the group consisting of phosphorous acid derivs., etc.; and a third ingredient selected from the group consisting of antioxidants, etc. Thus, glyphosate isopropylamine salt 1000 + calcium propionate 500 + Pr gallate 1000 ppm controlled the height of gramineous weeds such as *Setaria viridis* and broadleaf weeds (e.g. *Ipomoea purpurea*).

IT 9069-80-1, Formaldehyde-naphthalenesulfonic acid polymer ammonium salt 9084-06-4, Naphthalenesulfonic acid-formaldehyde polymer sodium salt
 (surfactant; weed growth-inhibiting formulations containing nonselective organophosphorus herbicides)

RN 9069-80-1 HCAPLUS

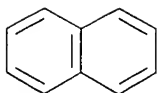
CN Naphthalenesulfonic acid, polymer with formaldehyde, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 9017-33-8
 CMF (C10 H8 O3 S . C H2 O)x
 CCI PMS

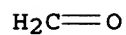
CM 2

CRN 25155-19-5
 CMF C10 H8 O3 S
 CCI IDS

D1- SO₃H

CM 3

CRN 50-00-0
 CMF C H2 O



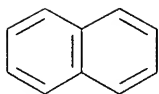
RN 9084-06-4 HCAPLUS
 CN Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt
 (9CI) (CA INDEX NAME)

CM 1

CRN 9017-33-8
 CMF (C10 H8 O3 S . C H2 O)x
 CCI PMS

CM 2

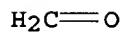
CRN 25155-19-5
 CMF C10 H8 O3 S
 CCI IDS



D1- SO₃H

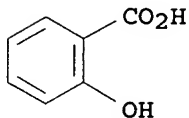
CM 3

CRN 50-00-0
 CMF C H2 O



IT 824-35-1D, Calcium salicylate, mixts. with
 organophosphorus herbicides, mixts.
 (weed growth-inhibiting formulations containing nonselective
 organophosphorus herbicides)

RN 824-35-1 HCAPLUS
 CN Benzoic acid, 2-hydroxy-, calcium salt (2:1) (9CI) (CA INDEX
 NAME)



●1/2 Ca

IT 9038-56-6, Styrene-sodium maleate copolymer
 37307-94-1, Formaldehyde-phenolsulfonic acid
 polymer, sodium salt
 (weed growth-inhibiting formulations containing nonselective
 organophosphorus herbicides)

RN 9038-56-6 HCAPLUS

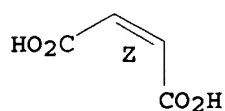
CN 2-Butenedioic acid (2Z)-, sodium salt, polymer with ethenylbenzene
 (9CI) (CA INDEX NAME)

CM 1

CRN 18016-19-8

CMF C4 H4 O4 . x Na

Double bond geometry as shown.

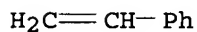


●x Na

CM 2

CRN 100-42-5

CMF C8 H8



RN 37307-94-1 HCAPLUS

CN Benzenesulfonic acid, hydroxy-, polymer with formaldehyde, sodium
 salt (9CI) (CA INDEX NAME)

CM 1

CRN 50973-35-8

CMF (C6 H6 O4 S . C H2 O)x

CCI PMS

CM 2

CRN 1333-39-7

CMF C6 H6 O4 S

CCI IDS



D1- OH

D1- SO₃H

CM 3

CRN 50-00-0

CMF C H₂ OH₂C=O

- IC ICM A01N057-20
ICS A01N057-12; A01N063-02; A01N059-06; A01N025-00
- CC 5-3 (Agrochemical Bioregulators)
- IT Amines, biological studies
(hindered, **photostabilizers**; weed growth-inhibiting formulations containing nonselective organophosphorus herbicides)
- IT Antioxidants
(**phenolic**; weed growth-inhibiting formulations containing nonselective organophosphorus herbicides)
- IT 52829-07-9, Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate
(**photostabilizer**; weed growth-inhibiting formulations containing nonselective organophosphorus herbicides)
- IT 9069-80-1, Formaldehyde-naphthalenesulfonic acid polymer ammonium salt 9084-06-4, Naphthalenesulfonic acid-formaldehyde polymer sodium salt
(surfactant; weed growth-inhibiting formulations containing nonselective organophosphorus herbicides)
- IT 50-00-0D, Formaldehyde, salts, mixts., biological studies
50-21-5D, Lactic acid, salts, mixts. with organophosphorus herbicides 50-81-7D, L-Ascorbic acid, salts, mixts. with organophosphorus herbicides, biological studies 52-90-4D, Cysteine, salts, mixts. with organophosphorus herbicides 56-12-2D, GABA, salts, mixts. with organophosphorus herbicides 56-40-6D, Glycine, salts, mixts. with organophosphorus herbicides, biological studies 56-41-7D, Alanine, salts, mixts. with organophosphorus herbicides 56-45-1D, Serine, salts, mixts. with organophosphorus herbicides 56-84-8D, Aspartic acid, salts, mixts. with organophosphorus herbicides 56-85-9D, Glutamine, salts, mixts. with organophosphorus herbicides 56-86-0D, Glutamic acid, salts, mixts. with organophosphorus herbicides 56-87-1D, Lysine, salts, mixts. with organophosphorus herbicides 56-89-3D, Cystine, salts, mixts. with organophosphorus herbicides 60-18-4D, Tyrosine, salts, mixts. with organophosphorus herbicides 61-90-5D, Leucine, salts, mixts. with organophosphorus herbicides 63-68-3D, Methionine, salts, mixts. with organophosphorus herbicides 63-91-2D, Phenylalanine, salts, mixts. with

organophosphorus herbicides 64-18-6D, Formic acid, salts, mixts. with organophosphorus herbicides, biological studies 64-19-7D, Acetic acid, salts, mixts. with organophosphorus herbicides, biological studies 70-26-8D, Ornithine, salts, mixts. with organophosphorus herbicides 70-47-3D, Asparagine, salts, mixts. with organophosphorus herbicides 71-00-1D, Histidine, salts, mixts. with organophosphorus herbicides 72-18-4D, Valine, salts, mixts. with organophosphorus herbicides 72-19-5D, Threonine, salts, mixts. with organophosphorus herbicides 73-22-3D, Tryptophan, salts, mixts. with organophosphorus herbicides 73-32-5D, Isoleucine, salts, mixts. with organophosphorus herbicides 74-79-3D, Arginine, salts, mixts. with organophosphorus herbicides 79-09-4D, Propionic acid, salts, mixts. with organophosphorus herbicides 87-69-4D, Tartaric acid, salts, mixts. with organophosphorus herbicides, biological studies 89-00-9D, Quinolinic acid, salts, mixts. 97-65-4D, Itaconic acid, salts, mixts. with organophosphorus herbicides 98-98-6D, Picolinic acid, salts, mixts. 99-50-3D, Protocatechuic acid, salts, mixts. with organophosphorus herbicides 99-96-7D, 4-Hydroxybenzoic acid, salts, mixts. with organophosphorus herbicides 103-82-2D, Phenylacetic acid, salts, mixts. with organophosphorus herbicides 107-95-9D, β -Alanine, salts, mixts. with organophosphorus herbicides 109-52-4D, Valeric acid, salts, mixts. with organophosphorus herbicides 110-15-6D, Succinic acid, salts, mixts. with organophosphorus herbicides 110-17-8D, Fumaric acid, salts, mixts. with organophosphorus herbicides 118-92-3D, Anthranilic acid, salts, mixts. with organophosphorus herbicides 123-76-2D, Levulinic acid, salts, mixts. with organophosphorus herbicides 127-17-3D, Pyruvic acid, salts, mixts. with organophosphorus herbicides 138-59-0D, Shikimic acid, salts, mixts. with organophosphorus herbicides 139-12-8D, Aluminum acetate, mixts. 141-82-2D, Malonic acid, salts, mixts. with organophosphorus herbicides 143-07-7D, Lauric acid, salts, mixts. with organophosphorus herbicides 144-62-7D, Oxalic acid, salts, mixts. with organophosphorus herbicides 147-85-3D, Proline, salts, mixts. with organophosphorus herbicides 156-06-9D, Phenylpyruvic acid, salts, mixts. with organophosphorus herbicides 156-38-7D, p-Hydroxyphenylacetic acid, salts, mixts. with organophosphorus herbicides 298-12-4D, α -Ketoacetic acid, salts, mixts. with organophosphorus herbicides 299-28-5D, Calcium gluconate, mixts. 328-50-7D, 2-Oxoglutaric acid, salts, mixts. with organophosphorus herbicides 372-75-8D, Citrulline, salts, mixts. with organophosphorus herbicides 451-13-8D, Homogentisic acid, salts, mixts. with organophosphorus herbicides 471-34-1D, Calcium carbonate, mixts. 473-81-4D, Glyceric acid, salts, mixts. with organophosphorus herbicides 490-79-9D, Gentisic acid, salts, mixts. with organophosphorus herbicides 501-52-0D, Benzenepropanoic acid, salts, mixts. with organophosphorus herbicides 506-85-4D, Fulminic acid, salts, mixts. 512-25-4D, Barium citrate, mixts. with organophosphorus herbicides 526-95-4D, Gluconic acid, salts, mixts. with organophosphorus herbicides 535-75-1D, Pipecolic acid, salts, mixts. 541-50-4D, Acetoacetic acid, salts, mixts. with organophosphorus herbicides 542-32-5D, α -Aminoadipic acid, salts, mixts. with organophosphorus herbicides 542-78-9D, Malonaldehyde, salts, mixts. with organophosphorus herbicides 546-93-0D, Magnesium carbonate, mixts. 552-63-6D, Tropic acid, salts, mixts. with organophosphorus herbicides 567-36-2D, 3-Hydroxyproline, salts, mixts. with organophosphorus herbicides 591-64-0D, Calcium levulinate, mixts. 672-15-1D, Homoserine,

salts, mixts. with organophosphorus herbicides 759-05-7D, 2-Oxoisovaleric acid, salts, mixts. with organophosphorus herbicides 814-80-2D, Calcium lactate, mixts. 816-66-0D, 2-Oxoisocaproic acid, salts, mixts. with organophosphorus herbicides 824-35-1D, Calcium salicylate, mixts. with organophosphorus herbicides, mixts. 1071-83-6D, Glyphosate, mixts. containing herbicide and its salts 1113-60-6D, Hydroxypyruvic acid, salts, mixts. with organophosphorus herbicides 1305-62-0D, Calcium hydroxide, mixts. with organophosphorus herbicides 1309-42-8D, Magnesium hydroxide, mixts. with organophosphorus herbicides 1460-34-0D, 2-Oxo-3-methylvaleric acid, salts, mixts. with organophosphorus herbicides 2090-05-3D, Calcium benzoate, mixts. 2414-98-4D, Magnesium ethoxide, mixts. with organophosphorus herbicides 2439-99-8D, Glyphosine, mixts. containing herbicide and its salts 2466-09-3D, Diphosphoric acid, salts, mixts. 3164-34-9D, Calcium tartrate, mixts., biological studies 3184-35-8D, α -Ketoadipic acid, salts, mixts. with organophosphorus herbicides 3486-35-9D, Zinc carbonate, mixts. 3909-12-4D, Threonic acid, salts, mixts. with organophosphorus herbicides 4075-81-4D, Calcium propionate, mixts. 6303-21-5D, Phosphinic acid, salts, mixts. 6556-12-3D, Glucuronic acid, salts, mixts. with organophosphorus herbicides 6667-60-3D, β -Methylaspartic acid, salts, mixts. with organophosphorus herbicides 6915-15-7D, Malic acid, salts, mixts. with organophosphorus herbicides 7230-93-5D, Aluminum laurate, mixts. 7429-90-5D, Aluminum, salts, mixts. with organophosphorus herbicides, biological studies 7439-89-6D, Iron, salts, mixts. with organophosphorus herbicides, biological studies 7439-95-4D, Magnesium, salts, mixts. with organophosphorus herbicides, biological studies 7440-39-3D, Barium, salts, mixts. with organophosphorus herbicides, biological studies 7440-66-6D, Zinc, salts, mixts. with organophosphorus herbicides, biological studies 7440-70-2D, Calcium, salts, mixts. with organophosphorus herbicides, biological studies 7446-70-0D, Aluminum chloride, mixts. 7487-88-9D, Magnesium sulfate, mixts. 7646-85-7D, Zinc chloride, mixts. 7693-13-2D, Calcium citrate, mixts. with organophosphorus herbicides 7705-08-0D, Iron(III) chloride, mixts. 7720-78-7D, Ferrous sulfate, mixts. 7733-02-0D, Zinc sulfate, mixts. 7757-93-9D, Calcium hydrogen phosphate, mixts. 7758-94-3D, Iron(II) chloride, mixts. 7778-18-9D, Calcium sulfate, mixts. 7779-25-1D, Magnesium citrate, mixts. with organophosphorus herbicides 7779-88-6D, Zinc nitrate, mixts. 7779-90-0D, Zinc phosphate, mixts. 7784-25-0D, Ammonium aluminum sulfate, mixts. with organophosphorus herbicides 7786-30-3D, Magnesium chloride, mixts. 7789-79-9D, Phosphinic acid, calcium salt, mixts. 9005-32-7D, Alginic acid, salts, mixts. with organophosphorus herbicides 9012-76-4D, Chitosan, mixts. with organophosphorus herbicides 10028-22-5D, Ferric sulfate, mixts. 10043-01-3D, Aluminum sulfate, mixts. 10043-01-3D, Alum, mixts. with organophosphorus herbicides 10043-52-4D, Calcium chloride, mixts. 10124-37-5D, Calcium nitrate, mixts. 10257-55-3D, Calcium sulfite, mixts. 10377-60-3D, Magnesium nitrate, mixts. 10402-24-1D, Iron phosphate, mixts. 11113-66-9D, Iron hydroxide, mixts. with organophosphorus herbicides 13473-90-0D, Aluminum nitrate, mixts. 13598-36-2D, Phosphonic acid, esters, salts, mixts. with organophosphorus herbicides 14104-77-9D, Iron nitrate, mixts. 14455-29-9D, Aluminum carbonate, mixts. 14866-19-4D, Calcium dihydrogen pyrophosphate, mixts. 15007-61-1D, Potassium aluminum sulfate, mixts. with organophosphorus herbicides 15099-32-8D, Phosphonic acid,

aluminum salt, mixts. 15479-57-9D, Aluminum salicylate, mixts. with organophosphorus herbicides 17194-00-2D, Barium hydroxide, mixts. with organophosphorus herbicides 18917-91-4D, Aluminum lactate, mixts. 18917-93-6D, Magnesium lactate, mixts. 19022-77-6D, Aluminum acetoacetate, mixts. with organophosphorus herbicides 20196-46-7D, Sulfoxylic acid, salts, mixts. 20246-53-1D, Gulonic acid, salts, mixts. with organophosphorus herbicides 20427-58-1D, Zinc hydroxide, mixts. with organophosphorus herbicides 21645-51-2D, Aluminum hydroxide, mixts. with organophosphorus herbicides 25493-06-5D, Phosphonic acid, calcium salt, mixts. 30581-89-6D, Imidazoleacetic acid, salts, mixts. with organophosphorus herbicides 31142-56-0D, Aluminum citrate, mixts. with organophosphorus herbicides 32378-14-6D, mixts. 33239-40-6D, . α .-Ketosuccinamic acid, salts, mixts. with organophosphorus herbicides 34296-08-7D, Barium isopropyl phosphate, mixts. with organophosphorus herbicides 35597-43-4D, Bialaphos, mixts. containing herbicide and its salts 36413-60-2D, Quinic acid, mixts. with organophosphorus herbicides 39148-24-8D, Fosetyl Al, mixts. 51276-47-2D, Glufosinate, mixts. containing herbicide and its salts 53500-11-1D, mixts. with organophosphorus herbicides 61114-26-9D, mixts. with organophosphorus herbicides 65644-56-6D, Calcium glycerate, mixts. 106145-21-5D, mixts. 130752-20-4D, mixts. 207671-14-5D, mixts. with organophosphorus herbicides 207671-76-9D, mixts. with organophosphorus herbicides 207671-77-0D, mixts. with organophosphorus herbicides

(weed growth-inhibiting formulations containing nonselective organophosphorus herbicides)

IT 100-42-5D, Styrene, sulfonated, sodium salts 8061-51-6, Sodium ligninsulfonate 9038-56-6, Styrene-sodium maleate copolymer 37307-94-1, Formaldehyde-phenolsulfonic acid polymer, sodium salt

(weed growth-inhibiting formulations containing nonselective organophosphorus herbicides)

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L56 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:557093 HCAPLUS

DOCUMENT NUMBER: 131:206963

TITLE: Positive-working electrodeposition photoresist composition, pattern formation, and pattern

INVENTOR(S): Imai, Genji; Kogure, Hideo; Hasegawa, Takeya

PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11237731	A2	19990831	JP 1998-335061	1998
US 6187509	B1	20010213	US 1998-167564	1001

1998
1007

TW 430752

B

20010421

TW 1998-87116649

1998
1007

PRIORITY APPLN. INFO.:

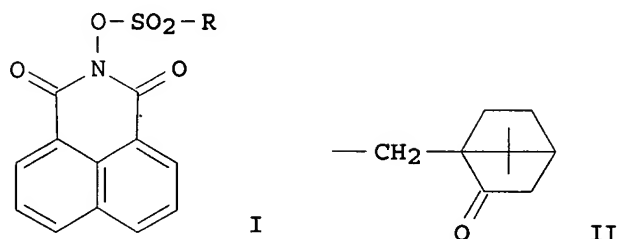
JP 1997-289218

A

1997
1007

OTHER SOURCE(S) :
GI

MARPAT 131:206963



AB The title **photoresist** comprises a composition containing (a) a polymer having 0.5-10 equiv/kg polymer carboxyl group and optionally ≥ 1 equiv/kg polymer hydroxyphenyl group, (b) a compound having ≥ 2 vinyl ether groups in its mol., (c) a compound, generating an acid upon visible light irradiation, naphthalenedicarboxylic sulfonylimides I [R = CR₁R₂R₃ (R₁₋₃ = H or F); C₆H₄Me-p, dicyclopentanyl group II], and (d) a sensitizing dye and is neutralized with a basic compound and then dissolved or dispersed in an aqueous medium. The **photoresist** composition is applied on a substrate with a conductive surface by electrodeposition, heated, irradiated selectively with visible light, heated, and developed with a basic developing solution to form a pattern. The pattern formed by the above method is suitable for elec. circuit, printing plate, etc. The **photoresist** composition provides a high resolution pattern with good profile and shows improved thermal stability.

IT 25053-96-7DP, o-Cresol-formaldehyde copolymer, reaction product with chloroethyl vinyl ether 25053-96-7P, o-Cresol-formaldehyde copolymer 25067-83-8P, Acrylic acid-butyl acrylate-2-hydroxyethyl acrylate-styrene copolymer 25609-90-9P, Acrylic acid-butyl methacrylate-styrene copolymer 30323-62-7P, Acrylic acid-butyl acrylate-ethyl acrylate-styrene copolymer 68189-17-3P, o-Cresol-formaldehyde-o-hydroxybenzoic acid copolymer (electrodeposition pos.-working **photoresist** with heat resistance)

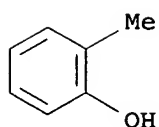
RN 25053-96-7 HCAPLUS

CN	Formaldehyde, polymer with 2-methylphenol (9CI)	(CA INDEX NAME)
----	---	-----------------

CM 1

CRN 95-48-7

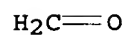
CMF C7 H8 O



CM 2

CRN 50-00-0

CMF C H2 O



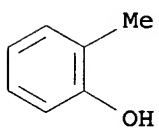
RN 25053-96-7 HCAPLUS

CN Formaldehyde, polymer with 2-methylphenol (9CI) (CA INDEX NAME)

CM 1

CRN 95-48-7

CMF C7 H8 O



CM 2

CRN 50-00-0

CMF C H2 O



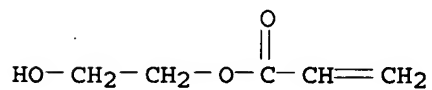
RN 25067-83-8 HCAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate, ethenylbenzene and 2-hydroxyethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

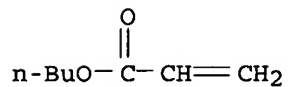
CRN 818-61-1

CMF C5 H8 O3



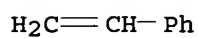
CM 2

CRN 141-32-2
CMF C7 H12 O2



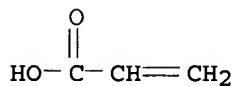
CM 3

CRN 100-42-5
CMF C8 H8



CM 4

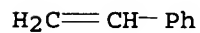
CRN 79-10-7
CMF C3 H4 O2



RN 25609-90-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
ethenylbenzene and 2-propenoic acid (9CI) (CA INDEX NAME)

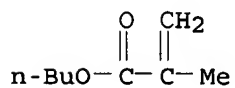
CM 1

CRN 100-42-5
CMF C8 H8



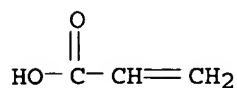
CM 2

CRN 97-88-1
CMF C8 H14 O2



CM 3

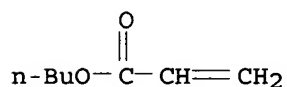
CRN 79-10-7
CMF C3 H4 O2



RN 30323-62-7 HCAPLUS
CN 2-Propenoic acid, polymer with butyl 2-propenoate, ethenylbenzene
and ethyl 2-propenoate (9CI) (CA INDEX NAME)

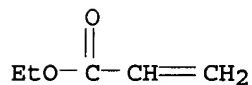
CM 1

CRN 141-32-2
CMF C7 H12 O2



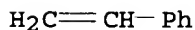
CM 2

CRN 140-88-5
CMF C5 H8 O2



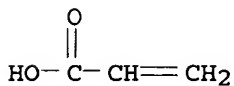
CM 3

CRN 100-42-5
CMF C8 H8



CM 4

CRN 79-10-7
CMF C3 H4 O2



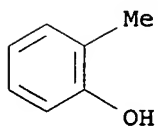
RN 68189-17-3 HCAPLUS
CN Benzoic acid, 2-hydroxy-, polymer with formaldehyde and

2-methylphenol (9CI) (CA INDEX NAME)

CM 1

CRN 95-48-7

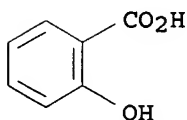
CMF C7 H8 O



CM 2

CRN 69-72-7

CMF C7 H6 O3



CM 3

CRN 50-00-0

CMF C H2 O

H₂C=O

- IC ICM G03F007-004
ICS G03F007-004; C08L101-00; H05K003-00
- CC 74-5 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)
Section cross-reference(s): 42
- ST pos working **photoresist** electrodeposition heat resistant; carboxy contg polymer pos working **photoresist**; acid generating agent naphthalenedicarboxylic sulfonylimide; vinyl ether pos working **photoresist** electrodeposition
- IT Electrodeposition
Heat-resistant materials
Positive **photoresists**
(electrodeposition pos.-working **photoresist** with heat resistance)
- IT **Phenolic** resins, uses
(electrodeposition pos.-working **photoresist** with heat resistance)
- IT Printed circuit boards
(electrodeposition pos.-working **photoresist** with heat resistance for)
- IT 83697-53-4, NAI 100
(NAI 100, acid-generating agent; electrodeposition pos.-working

photoresist with heat resistance)
 IT 5551-72-4, NAI 101 85342-62-7, NAI 105
 (acid-generating agent; electrodeposition pos.-working
 photoresist with heat resistance)
 IT 110-75-8DP, 2-Chloroethyl vinyl ether, reaction product with
 cresol-formaldehyde copolymer 25053-96-7DP,
 o-Cresol-formaldehyde copolymer, reaction product with chloroethyl
 vinyl ether 25053-96-7P, o-Cresol-formaldehyde copolymer
 25067-83-8P, Acrylic acid-butyl acrylate-2-hydroxyethyl
 acrylate-styrene copolymer 25609-90-9P, Acrylic
 acid-butyl methacrylate-styrene copolymer 30323-62-7P,
 Acrylic acid-butyl acrylate-ethyl acrylate-styrene copolymer
 51512-40-4P, Acrylic acid-p-hydroxystyrene copolymer 52411-04-8P
 68189-17-3P, o-Cresol-formaldehyde-o-hydroxybenzoic acid
 copolymer 96913-05-2P, Butyl acrylate-p-hydroxystyrene copolymer
 161613-66-7P, Acrylic acid-butyl acrylate-p-hydroxystyrene
 copolymer 175356-67-9P
 (electrodeposition pos.-working photoresist with heat
 resistance)
 IT 77-99-6, Trimethylolpropane 80-05-7, Bisphenol A,
 reactions 110-75-8, 2-Chloroethyl vinyl ether 764-48-7,
 2-Hydroxyethyl vinyl ether 26471-62-5, Tolylene diisocyanate
 (electrodeposition pos.-working photoresist with heat
 resistance containing vinyl ether from)
 IT 136996-92-4, LS 5 155306-71-1, NKX 1595 209797-82-0
 227475-07-2
 (sensitizer; electrodeposition pos.-working photoresist
 with heat resistance)

L56 ANSWER 5 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:370136 HCAPLUS

DOCUMENT NUMBER: 131:65887

TITLE: Visible light-sensitive photoresist
 composition for pattern formation and method
 for pattern formation using same

INVENTOR(S): Imai, Genji; Kogure, Hideo

PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 11153858	A2	19990608	JP 1998-263911	1998 0903
US 6124077	A	20000926	US 1998-145974	1998 0903
TW 468091	B	20011211	TW 1998-87114632	1998 0903
PRIORITY APPLN. INFO.:			JP 1997-256236	A 1997 0905

JP 1997-257974

A

1997
0908

AB The visible light-sensitive **photoresist** composition contains a polymer having carboxyl group, a compound having ≥ 2 vinyl ether groups, a visible light-sensitive acid generator and a sensitizing dye, wherein the acid generator is 1,8-naphthalimidyl sulfonate. The **photoresist** composition shows improved heat-resistance.

IT 25053-96-7P, Formaldehyde-2-methylphenol copolymer 25067-83-8P, Acrylic acid-n-butyl acrylate-2-hydroxyethyl acrylate-styrene copolymer 25586-20-3P, Acrylic acid-n-butyl acrylate-styrene copolymer 30323-62-7P, Acrylic acid-ethyl acrylate-butyl acrylate-styrene copolymer 68189-17-3P, 2-Methylphenol-2-hydroxybenzoic acid-formaldehyde copolymer 70198-25-3P, 2-Methylphenol-formaldehyde-oxalic acid copolymer
(polymer for visible light-sensitive **photoresist** composition)

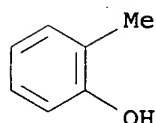
RN 25053-96-7 HCAPLUS

CN Formaldehyde, polymer with 2-methylphenol (9CI) (CA INDEX NAME)

CM 1

CRN 95-48-7

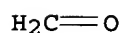
CMF C7 H8 O



CM 2

CRN 50-00-0

CMF C H2 O



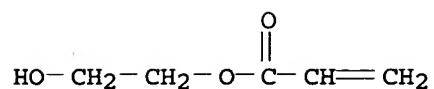
RN 25067-83-8 HCAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate, ethenylbenzene and 2-hydroxyethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 818-61-1

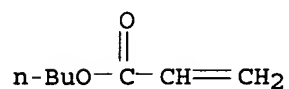
CMF C5 H8 O3



CM 2

CRN 141-32-2

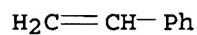
CMF C7 H12 O2



CM 3

CRN 100-42-5

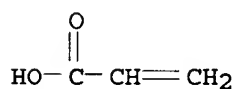
CMF C8 H8



CM 4

CRN 79-10-7

CMF C3 H4 O2



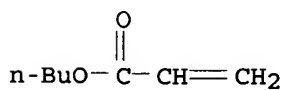
RN 25586-20-3 HCAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2

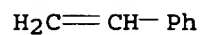
CMF C7 H12 O2



CM 2

CRN 100-42-5

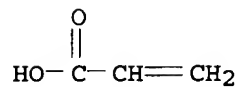
CMF C8 H8



CM 3

CRN 79-10-7

CMF C3 H4 O2



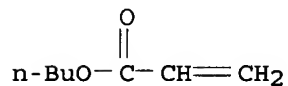
RN 30323-62-7 HCAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate, ethenylbenzene
and ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2

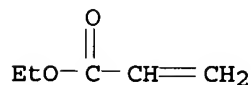
CMF C7 H12 O2



CM 2

CRN 140-88-5

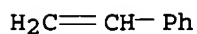
CMF C5 H8 O2



CM 3

CRN 100-42-5

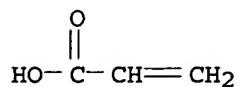
CMF C8 H8



CM 4

CRN 79-10-7

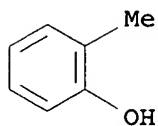
CMF C3 H4 O2



RN 68189-17-3 HCAPLUS
CN Benzoic acid, 2-hydroxy-, polymer with formaldehyde and
2-methylphenol (9CI) (CA INDEX NAME)

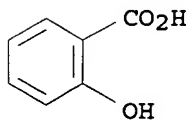
CM 1

CRN 95-48-7
CMF C7 H8 O



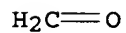
CM 2

CRN 69-72-7
CMF C7 H6 O3



CM 3

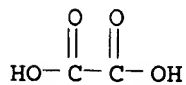
CRN 50-00-0
CMF C H2 O



RN 70198-25-3 HCAPLUS
CN Ethanedioic acid, polymer with formaldehyde and 2-methylphenol
(9CI) (CA INDEX NAME)

CM 1

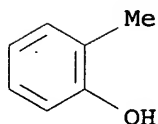
CRN 144-62-7
CMF C2 H2 O4



CM 2

CRN 95-48-7

CMF C7 H8 O



CM 3

CRN 50-00-0

CMF C H2 O

 $\text{H}_2\text{C}=\text{O}$

IC ICM G03F007-004

ICS C08K005-06; C08K005-41; C08K005-47; C08L101-02; G03F007-033;
G03F007-039; G03F007-38; H01L021-027; C09D005-32CC 74-5 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 76

ST visible light sensitive **photoresist** compn acid generatorIT **Photoresists**

Printing (nonimpact)

Semiconductor device fabrication

(visible light-sensitive **photoresist** composition for
pattern formation and method for pattern formation using same)

IT 136996-92-4, LS 5

(LS 5; sensitizing dye for visible light-sensitive
photoresist composition)

IT 5551-72-4, NAI 101

(NAI 101; acid-generator for visible light-sensitive
photoresist composition)

IT 83697-53-4 137867-61-9, NAT 105

(acid-generator for visible light-sensitive **photoresist**
composition)

IT 25053-96-7P, Formaldehyde-2-methylphenol

copolymer 25067-83-8P, Acrylic acid-n-butyl

acrylate-2-hydroxyethyl acrylate-styrene copolymer

25586-20-3P, Acrylic acid-n-butyl acrylate-styrene

copolymer 30323-62-7P, Acrylic acid-ethyl acrylate-butyl

acrylate-styrene copolymer 51512-40-4P, Acrylic acid-p-hydroxy

styrene copolymer 68189-17-3P, 2-Methylphenol

-2-hydroxybenzoic acid-formaldehyde copolymer 70198-25-3P

, 2-Methylphenol-formaldehyde-oxalic acid copolymer

96913-05-2P, Butyl acrylate-4-hydroxystyrene copolymer

161613-66-7P, Acrylic acid-4-hydroxystyrene-butyl acrylate

copolymer 166527-07-7P, Bisphenol A-2-chloroethyl

vinyl ether copolymer 227475-06-1P, 2-Hydroxyethyl vinyl

ether-trimethylolpropane-toluene diisocyanate copolymer

(polymer for visible light-sensitive photoresist composition)
 IT 155306-71-1, NKX 1595 209797-82-0 227475-07-2
 (sensitizing dye for visible light-sensitive photoresist composition)

L56 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1996:382794 HCAPLUS
 DOCUMENT NUMBER: 125:45273
 TITLE: Manufacture of color filter
 INVENTOR(S): Tamura, Koichi; Iwazawa, Naozumi; Imai, Genji;
 Norimatsu, Tsutomu
 PATENT ASSIGNEE(S): Kansai Paint Co Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 08094827	A2	19960412	JP 1994-257579	1994 0926

PRIORITY APPLN. INFO.: JP 1994-257579

1994
0926

AB A color filter is manufactured by (1) forming a transparent elec. conductive layer on a transparent substrate, (2) forming a layer of a **photosensitive** composition containing (a) a polymer or a polymer mixture having carboxy groups and hydroxyphenyl groups, (b) a compound having ≥ 2 vinyl ether groups, and (c) a compound capable of generating an acid on irradiation with actinic rays, and heating to form a pos.-working **photosensitive** layer, (3) exposing the **photosensitive** layer to light, and developing to expose part of the transparent elec. conductive layer, (4) forming a colored layer on the exposed elec. conductive layer by electrodeposition, and (5) repeating the steps (3) and (4) as many as necessary.

IT 25053-96-7DP, o-Cresol-formaldehyde copolymer, reaction product with 2-chloroethyl vinyl ether 25053-96-7P, o-Cresol-formaldehyde copolymer 25067-83-8P, Acrylic acidbutyl acrylate-2-hydroxyethyl acrylate-styrene copolymer 25609-90-9P, Acrylic acidbutyl methacrylate-styrene copolymer 68189-17-3P, o-Hydroxybenzoic acid-o-cresol-formaldehyde copolymer
 (photosensitive resin layer from)

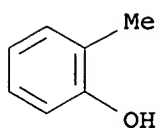
RN 25053-96-7 HCAPLUS

CN Formaldehyde, polymer with 2-methylphenol (9CI) (CA INDEX NAME)

CM 1

CRN 95-48-7

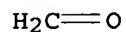
CMF C7 H8 O



CM 2

CRN 50-00-0

CMF C H2 O



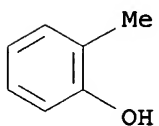
RN 25053-96-7 HCAPLUS

CN Formaldehyde, polymer with 2-methylphenol (9CI) (CA INDEX NAME)

CM 1

CRN 95-48-7

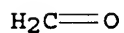
CMF C7 H8 O



CM 2

CRN 50-00-0

CMF C H2 O



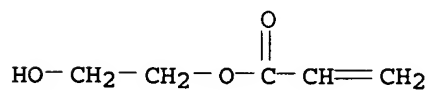
RN 25067-83-8 HCAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate, ethenylbenzene and 2-hydroxyethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 818-61-1

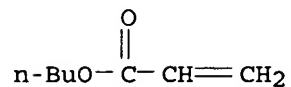
CMF C5 H8 O3



CM 2

CRN 141-32-2

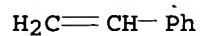
CMF C7 H12 O2



CM 3

CRN 100-42-5

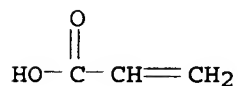
CMF C8 H8



CM 4

CRN 79-10-7

CMF C3 H4 O2



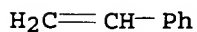
RN 25609-90-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
ethenylbenzene and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5

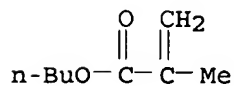
CMF C8 H8



CM 2

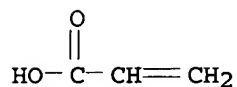
CRN 97-88-1

CMF C8 H14 O2



CM 3

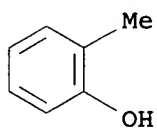
CRN 79-10-7
CMF C3 H4 O2



RN 68189-17-3 HCAPLUS
CN Benzoic acid, 2-hydroxy-, polymer with formaldehyde and
2-methylphenol (9CI) (CA INDEX NAME)

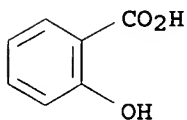
CM 1

CRN 95-48-7
CMF C7 H8 O



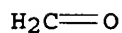
CM 2

CRN 69-72-7
CMF C7 H6 O3



CM 3

CRN 50-00-0
CMF C H2 O



IC ICM G02B005-20
ICS G02F001-1335
CC 74-13 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)
IT Phenolic resins, processes
(novolak, for making color filter)
IT Resists
(photo-, for making color filter)
IT 161061-15-0 166527-06-6
(acid generator for photosensitive resin layer)

IT 110-75-8DP, 2-Chloroethyl vinyl ether, reaction product with cresol novolak 25053-96-7DP, o-Cresol-formaldehyde copolymer, reaction product with 2-chloroethyl vinyl ether 25053-96-7P, o-Cresol-formaldehyde copolymer 25067-83-8P, Acrylic acidbutyl acrylate-2-hydroxyethyl acrylate-styrene copolymer 25609-90-9P, Acrylic acidbutyl methacrylate-styrene copolymer 68189-17-3P, o-Hydroxybenzoic acid-o-cresol-formaldehyde copolymer 96913-05-2P, Butyl acrylate-p-Hydroxystyrene copolymer 161613-66-7P, p-Hydroxystyrene-butyl acrylate-acrylic acid copolymer 166527-07-7P, Bisphenol A-vinyl 2-chloroethyl ether copolymer
(photosensitive resin layer from)

L56 ANSWER 7 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:374994 HCAPLUS

DOCUMENT NUMBER: 122:201278

TITLE: Photosensitive composition and pattern forming method

INVENTOR(S): Imai, Genji; Iwazawa, Naozumi; Yamaoka, Tsugio

PATENT ASSIGNEE(S): Kansai Paint Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 06308733	A2	19941104	JP 1993-119234	1993 0423

PRIORITY APPLN. INFO.: JP 1993-119234

1993
0423

AB The composition comprises a polymer having carboxy group or carboxy group and hydroxyphenyl group, a compound having a vinyl ether group in a mol. and a compound generating acids by active ray irradiation. The pattern forming method comprises coating the composition on a substrate, heating the substrate, selectively irradiating the active ray, heating the substrate, and developing by basic developer. The composition shows high resolution, gives fine patterns, and is useful for making elec. devices.

IT 25609-90-9P, Acrylic acid-butyl methacrylate-styrene copolymer 30323-62-7P, Acrylic acid-butyl acrylate-ethyl acrylate-styrene copolymer 34268-75-2P
68189-17-3P

(photoresist composition containing vinyl ether compound and polymer with carboxy group)

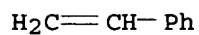
RN 25609-90-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with ethenylbenzene and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5

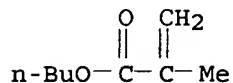
CMF C8 H8



CM 2

CRN 97-88-1

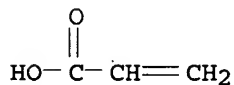
CMF C8 H14 O2



CM 3

CRN 79-10-7

CMF C3 H4 O2



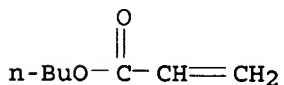
RN 30323-62-7 HCAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate, ethenylbenzene
and ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2

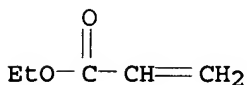
CMF C7 H12 O2



CM 2

CRN 140-88-5

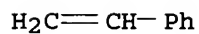
CMF C5 H8 O2



CM 3

CRN 100-42-5

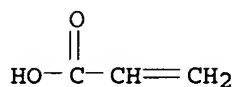
CMF C8 H8



CM 4

CRN 79-10-7

CMF C3 H4 O2



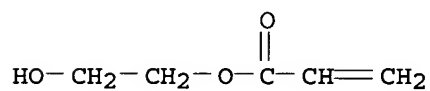
RN 34268-75-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
ethenylbenzene, 2-hydroxyethyl-2-propenoate and 2-propenoic acid
(9CI) (CA INDEX NAME)

CM 1

CRN 818-61-1

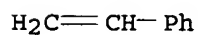
CMF C5 H8 O3



CM 2

CRN 100-42-5

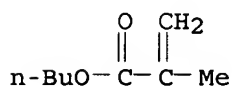
CMF C8 H8



CM 3

CRN 97-88-1

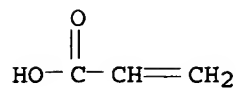
CMF C8 H14 O2



CM 4

CRN 79-10-7

CMF C3 H4 O2



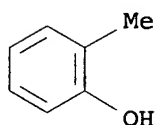
RN 68189-17-3 HCAPLUS

CN Benzoic acid, 2-hydroxy-, polymer with formaldehyde and 2-methylphenol (9CI) (CA INDEX NAME)

CM 1

CRN 95-48-7

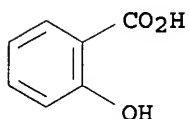
CMF C7 H8 O



CM 2

CRN 69-72-7

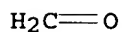
CMF C7 H6 O3



CM 3

CRN 50-00-0

CMF C H2 O



IC ICM G03F007-039

ICS C09D005-44; G03F007-004; G03F007-029; H01L021-027; H05K003-00

CC 74-5 (Radiation Chemistry, Photochemistry, and

Photographic and Other Reprographic Processes)

Section cross-reference(s): 76

ST photoresist carboxy hydroxyphenyl polymer; vinyl ether

compd acid generator photoresist

IT Phenolic resins, uses

(novolak, photoresist composition containing vinyl ether compound

and polymer with carboxy group)

IT Resists

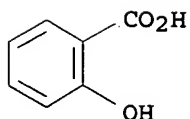
(photo-, photoresist composition containing

vinylether compound and polymer with carboxy group)
 IT 75482-18-7 161061-13-8 161061-15-0
 (acid generator; photoresist composition containing vinylether
 compound and polymer with carboxy group)
 IT 25609-90-9P, Acrylic acid-butyl methacrylate-styrene
 copolymer 30323-62-7P, Acrylic acid-butyl acrylate-ethyl
 acrylate-styrene copolymer 34268-75-2P 52411-03-7P
 68189-17-3P 94441-21-1P 161613-66-7P 161812-39-1P
 (photoresist composition containing vinylether compound and
 polymer with carboxy group)
 IT 98-54-4 104-40-5, p-Nonylphenol 110-75-8,
 2-Chloroethyl vinyl ether 764-48-7, 2-Hydroxyethyl vinyl ether
 110726-08-4
 (preparation of vinylether compound)

L56 ANSWER 8 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1994:535593 HCAPLUS
 DOCUMENT NUMBER: 121:135593
 TITLE: Polyphenylene ether-diene rubber blends
 INVENTOR(S): Richards, William David; White, Dwain
 Montgomery
 PATENT ASSIGNEE(S): General Electric Co., USA
 SOURCE: Eur. Pat. Appl., 8 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 592144	A1	19940413	EP 1993-307742	1993 0929
R: DE, ES, FR, GB, IT, NL JP 06207049	A2	19940726	JP 1993-250313	1993 1006
PRIORITY APPLN. INFO.:		US 1992-957120	A	1992 1007

AB The resistance to loss of impact strength of the title blends
 after being thermally recycled is improved by using
 polyoxyphenylenes end-capped by salicylate esters. The extruded
 moldable blends can be further used with a matrix material, such
 as a polyamide, polyester, or polyether-polyimide.
 IT 69-72-7D, Salicyclic acid, esters, polyoxyphenylenes
 derivs.
 (diene rubber blends with, with good impact resistance after
 thermally recycling)
 RN 69-72-7 HCAPLUS
 CN Benzoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)



IT 9003-53-6, Polystyrene
 (salicylate ester-terminated polyoxyphenylene-diene rubber
 blends containing, with good impact resistance after thermal
 recycling)
 RN 9003-53-6 HCAPLUS
 CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 100-42-5
 CMF C8 H8

$H_2C=CH-Ph$

IC ICM C08L071-12
 CC 37-6 (Plastics Manufacture and Processing)
 IT 69-72-7D, Salicyclic acid, esters, polyoxyphenylenes
 derivs. 24938-67-8D, Poly(2,6-dimethyl-1,4-phenylene ether),
 salicylate ester-terminated 25134-01-4D, 2,6-
Dimethylphenol homopolymer, salicylate ester-terminated
 (diene rubber blends with, with good impact resistance after
 thermally recycling)
 IT 9003-53-6, Polystyrene
 (salicylate ester-terminated polyoxyphenylene-diene rubber
 blends containing, with good impact resistance after thermal
 recycling)

L56 ANSWER 9 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1992:245364 HCAPLUS
 DOCUMENT NUMBER: 116:245364
 TITLE: Color-developing toner containing two types of
 powders
 INVENTOR(S): Hattori, Yasuhiro
 PATENT ASSIGNEE(S): Brother Industries, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

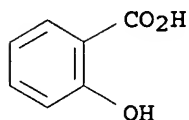
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03271750	A2	19911203	JP 1990-71352	1990 0320
PRIORITY APPLN. INFO.:				1990 0320
				JP 1990-71352

AB The toner comprises (1) a 1st powder mainly containing a color-developer, and (2) a 2nd powder mainly containing a binder resin and charging oppositely to the 1st powder. The toner shows good coatability and color-developability.

IT 69-72-7D, Salicylic acid, derivative 9003-53-6, Polystyrene (color-developing toner containing)

RN 69-72-7 HCAPLUS

CN Benzoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)



RN 9003-53-6 HCAPLUS

CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5

CMF C8 H8

$\text{H}_2\text{C}=\text{CH}-\text{Ph}$

IC ICM G03G009-09
ICS G03G009-097

CC 74-12 (Radiation Chemistry, **Photochemistry**, and **Photographic** and Other Reprographic Processes)

IT 69-72-7D, Salicylic acid, derivative 108-95-2D, **Phenol**, derivative 9003-53-6, Polystyrene (color-developing toner containing)

L56 ANSWER 10 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1992:135528 HCAPLUS

DOCUMENT NUMBER: 116:135528

TITLE: Performance-oriented packaging standards; changes to classification, hazard communication, packaging and handling requirements based on UN standards and agency initiative

CORPORATE SOURCE: United States Dept. of Transportation, Washington, DC, 20590-0001, USA

SOURCE: Federal Register (1990), 55(246), 52402-729, 21 Dec 1990

CODEN: FEREAC; ISSN: 0097-6326

DOCUMENT TYPE: Journal

LANGUAGE: English

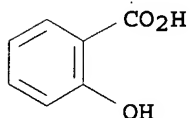
AB The hazardous materials regulations under the Federal Hazardous Materials Transportation Act are revised based on the United Nations recommendations on the transport of dangerous goods. The regulations cover the classification of materials, packaging requirements, and package marking, labeling, and shipping documentation, as well as transportation modes and handling, and incident reporting. Performance-oriented stds. are adopted for packaging for bulk and nonbulk transportation, and SI units of

measurement generally replace US customary units. Hazardous material descriptions and proper shipping names are tabulated together with hazard class, identification nos., packing group, label required, special provisions, packaging authorizations, quantity limitations, and vessel stowage requirements.

IT 9003-53-6, Polystyrene 29790-52-1, Nicotine
salicylate 30525-89-4, Paraformaldehyde
(packaging and transport of, stds. for)
RN 9003-53-6 HCAPLUS
CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)
CM 1
CRN 100-42-5
CMF C8 H8

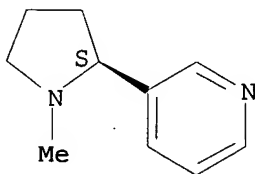
$\text{H}_2\text{C}=\text{CH}-\text{Ph}$

RN 29790-52-1 HCAPLUS
CN Benzoic acid, 2-hydroxy-, compd. with 3-[(2S)-1-methyl-2-pyrrolidinyl]pyridine (1:1) (9CI) (CA INDEX NAME)
CM 1
CRN 69-72-7
CMF C7 H6 O3



CM 2
CRN 54-11-5
CMF C10 H14 N2

Absolute stereochemistry. Rotation (-).



RN 30525-89-4 HCAPLUS
CN Paraformaldehyde (9CI) (CA INDEX NAME)
CM 1
CRN 50-00-0
CMF C H2 O

H₂C=O

CC 59-6 (Air Pollution and Industrial Hygiene)
IT Adhesives
Alcoholic beverages
Ammunition
Antifreeze substances
Bactericides, Disinfectants, and Antiseptics
Batteries, primary
Blasting gelatin
Bombs (explosives)
Carbon paper
Cartridges
Castor bean
Coating materials
Corrosive substances
Cotton
Creosote
Detonators
Dyes
Dynamite
Electric fuses
Exothermic materials
Explosives
Flavoring materials
Flue dust
Fuel cells
Fuel oil
Fuels, diesel
Fuels, jet aircraft
Fusel oil
Fuses, explosives
Gas oils
Hay
Herbicides
Igniters and Lighters
Insecticides
Lacrimators
Magnetic substances
Matches
Oxidizing agents
Perfumes
Pesticides
Petroleum products
Pharmaceuticals
Photoelectric devices
Poisons
Primers, explosive
Projectiles
Pyrophoric substances
Pyrotechnic compositions
Radioactive substances
Refrigerating apparatus
Rockets
Shale oils
Solvent naphtha
Sprays
Straw

Textiles
 Thermoelectric devices
 Torpedoes (weapons)
 Turpentine
 Wood preservatives
 (packaging and transport of, stds. for)

IT Phenols, miscellaneous
 (alkyl, packaging and transport of, stds. for)

IT 50-00-0, Formaldehyde, miscellaneous 54-11-5, Nicotine
 54-11-5D, Nicotine, compds. 55-63-0, Nitroglycerin 55-68-5,
 Phenylmercuric nitrate 56-18-8, 3,3'-Iminodipropylamine
 56-23-5, miscellaneous 56-38-2, Parathion 57-06-7, Allyl
 isothiocyanate 57-14-7 57-24-9D, Strychnine, salts 60-00-4,
 EDTA, miscellaneous 60-24-2 60-29-7, Diethyl ether,
 miscellaneous 60-34-4, Methylhydrazine 60-57-1, Dieldrin
 62-38-4, Phenylmercuric acetate 62-53-3, Aniline, miscellaneous
 62-74-8, Sodium fluoroacetate 64-17-5, Ethanol, miscellaneous
 64-18-6, Formic acid, miscellaneous 64-18-6D, Formic acid,
 chloro derivs. 64-19-7, Acetic acid, miscellaneous 64-67-5,
 Diethyl sulfate 66-25-1, Hexaldehyde 67-56-1, Methanol,
 miscellaneous 67-63-0, Isopropanol, miscellaneous 67-64-1,
 Acetone, miscellaneous 67-66-3, Chloroform, miscellaneous
 68-11-1, Thioglycolic acid, miscellaneous 68-12-2,
 N,N-Dimethylformamide, miscellaneous 70-11-1, Phenacyl bromide
 70-30-4, Hexachlorophene 71-23-8, n-Propanol, miscellaneous
 71-41-0, 1-Pentanol, miscellaneous 71-43-2, Benzene,
 miscellaneous 71-55-6, 1,1,1-Trichloroethane 74-82-8, Methane,
 miscellaneous 74-83-9, miscellaneous 74-84-0, Ethane,
 miscellaneous 74-85-1, Ethylene, miscellaneous 74-86-2,
 Acetylene, miscellaneous 74-87-3, Methyl chloride, miscellaneous
 74-88-4, Methyl iodide, miscellaneous 74-89-5, Methylamine,
 miscellaneous 74-90-8, Hydrogen cyanide, miscellaneous
 74-93-1, Methyl mercaptan, miscellaneous 74-95-3, Dibromomethane
 74-96-4, Ethyl bromide 74-97-5, Bromochloromethane 74-98-6,
 Propane, miscellaneous 75-00-3, Ethyl chloride 75-01-4,
 miscellaneous 75-02-5, Vinyl fluoride 75-04-7, Ethylamine,
 miscellaneous 75-05-8, Methyl cyanide, miscellaneous 75-07-0,
 Acetaldehyde, miscellaneous 75-08-1, Ethyl mercaptan 75-09-2,
 Dichloromethane, miscellaneous 75-15-0, Carbon disulfide,
 miscellaneous 75-16-1, Methyl magnesium bromide 75-18-3,
 Dimethyl sulfide 75-19-4, Cyclopropane 75-20-7, Calcium
 carbide 75-21-8, Ethylene oxide, miscellaneous 75-21-8
 75-25-2, Bromoform 75-26-3, 2-Bromopropane 75-28-5, Isobutane
 75-28-5D, Isobutane, mixts. 75-29-6, 2-Chloropropane 75-31-0,
 Isopropylamine, miscellaneous 75-33-2, Isopropyl mercaptan
 75-34-3, 1,1-Dichloroethane 75-35-4, miscellaneous 75-36-5,
 Acetyl chloride 75-38-7, 1,1-Difluoroethylene 75-39-8,
 Acetaldehyde ammonia 75-43-4, Dichloromonofluoromethane
 75-44-5, Phosgene 75-45-6, Chlorodifluoromethane 75-46-7,
 Trifluoromethane 75-50-3, Trimethylamine, miscellaneous
 75-52-5, Nitromethane, miscellaneous 75-54-7,
 Methylchlorosilane 75-55-8, Propylenimine 75-56-9, Propylene
 oxide, miscellaneous 75-59-2, Tetramethylammonium hydroxide
 75-60-5, Cacodylic acid 75-61-6, Dibromodifluoromethane
 75-63-8 75-71-8, Dichlorodifluoromethane 75-72-9,
 Chlorotrifluoromethane 75-73-0, Tetrafluoromethane 75-76-3,
 Tetramethylsilane 75-77-4, Trimethylchlorosilane, miscellaneous
 75-78-5, Dimethyldichlorosilane 75-79-6, Methyltrichlorosilane
 75-83-2 75-86-5, Acetone cyanohydrin 75-87-6, Chloral
 75-91-2, tert-Butyl hydroperoxide 75-94-5, Vinyltrichlorosilane

76-01-7, Pentachloroethane 76-02-8, Trichloroacetyl chloride
 76-03-9, properties 76-05-1, Trifluoroacetic acid, miscellaneous
 76-06-2, Chloropicrin 76-06-2D, Chloropicrin, mixts. 76-15-3
 76-16-4, Hexafluoroethane 76-19-7, Octafluoropropane 76-22-2,
 Camphor 77-47-4, Hexachlorocyclopentadiene 77-73-6 77-78-1,
 Dimethyl sulfate 78-00-2, Tetraethyl lead 78-10-4, Tetraethyl
 silicate 78-62-6, Dimethyldiethoxysilane 78-67-1,
 Azodiisobutyronitrile 78-76-2, 2-Bromobutane 78-78-4,
 Isopentane 78-79-5, Isoprene, miscellaneous 78-81-9,
 Isobutylamine 78-82-0, Isobutyronitrile 78-83-1, Isobutanol,
 miscellaneous 78-84-2, Isobutyraldehyde 78-85-3,
 Methacrylaldehyde 78-87-5, Propylene dichloride 78-89-7,
 Propylene chlorohydrin 78-90-0, 1,2-Propylenediamine 78-93-3,
 2-Butanone, miscellaneous 78-94-4, Methyl vinyl ketone,
 miscellaneous 78-95-5, Monochloroacetone 79-01-6,
 Trichloroethylene, miscellaneous 79-03-8, Propionyl chloride
 79-04-9, Chloroacetyl chloride 79-06-1, Acrylamide,
 miscellaneous 79-08-3, Bromoacetic acid 79-09-4, Propionic
 acid, miscellaneous 79-10-7, 2-Propenoic acid, miscellaneous
 79-11-8, Chloroacetic acid, miscellaneous 79-20-9, Methyl
 acetate 79-21-0, Peroxyacetic acid 79-22-1 79-24-3,
 Nitroethane 79-29-8, 2,3-Dimethylbutane 79-30-1, Isobutyryl
 chloride 79-31-2, Isobutyric acid 79-36-7, Dichloroacetyl
 chloride 79-38-9 79-41-4, miscellaneous 79-42-5 79-43-6,
 Dichloroacetic acid, miscellaneous 79-44-7, Dimethylcarbamoyl
 chloride 80-10-4, Diphenyldichlorosilane 80-15-9, Cumene
 hydroperoxide 80-17-1, Benzene sulfohydrazide 80-47-7,
 p-Menthane hydroperoxide 80-51-3, Diphenyloxide-4,4'-
 disulfohydrazide 80-56-8, α -Pinene 80-62-6 81-15-2
 82-71-3 85-44-9, 1,3-Isobenzofurandione 86-50-0, Azinphos
 methyl 87-68-3, Hexachlorobutadiene 87-90-1 88-17-5,
 2-Trifluoromethylaniline 88-72-2, o-Nitrotoluene 88-73-3,
 o-Chloronitrobenzene 88-74-4, o-Nitroaniline 88-75-5, o-
 Nitrophenol 88-89-1 89-58-7, p-Nitroxylylene 91-17-8,
 Decahydronaphthalene 91-20-3, Naphthalene, miscellaneous
 91-20-3D, Naphthalene, diozonide derivs. 91-22-5, Quinoline,
 miscellaneous 91-59-8, β -Naphthylamine 91-66-7,
 N,N-Diethylaniline 92-52-4D, Biphenyl, chloro derivs.
 92-52-4D, Biphenyl, halo derivs. 92-59-1, N-Ethyl-N-
 benzylaniline 92-87-5, Benzidine 93-58-3, Methyl benzoate
 94-17-7, p-Chlorobenzoyl peroxide 94-36-0, Benzoyl peroxide,
 miscellaneous 95-48-7, miscellaneous 95-50-1,
 o-Dichlorobenzene 95-54-5, o-Phenylenediamine, miscellaneous
 95-55-6, o-Aminophenol 95-80-7 95-85-2, 2-Amino-4-
chlorophenol 96-12-8, Dibromochloropropane 96-22-0,
 Diethyl ketone 96-23-1 96-24-2, Glycerol α -
 monochlorohydrin 96-32-2, Methyl bromoacetate 96-33-3
 96-34-4, Methyl chloroacetate 96-37-7, Methyl cyclopentane
 96-41-3, Cyclopentanol 97-62-1, Ethyl isobutyrate 97-63-2
 97-64-3, Ethyl lactate 97-72-3, Isobutyric anhydride 97-85-8,
 Isobutyl isobutyrate 97-86-9 97-88-1 97-95-0 97-96-1,
 2-Ethylbutyraldehyde 98-00-0, Furfuryl alcohol 98-01-1,
 Furfural, miscellaneous 98-07-7, Benzotrichloride 98-08-8,
 Benzotrifluoride 98-09-9, Benzene sulfonyl chloride 98-12-4,
 Cyclohexyltrichlorosilane 98-13-5, Phenyltrichlorosilane
 98-16-8, 3-Trifluoromethylaniline 98-82-8, Isopropylbenzene
 98-83-9, miscellaneous 98-85-1, α -Methylbenzyl alcohol
 98-87-3, Benzylidene chloride 98-88-4, Benzoyl chloride
 98-94-2 98-95-3, Nitrobenzene, miscellaneous 99-08-1,
 m-Nitrotoluene 99-09-2, m-Nitroaniline 99-35-4,

Trinitrobenzene 99-99-0, p-Nitrotoluene 100-00-5 100-01-6,
 p-Nitroaniline, miscellaneous 100-02-7, p-Nitrophenol,
 miscellaneous 100-17-4 100-34-5, Benzene diazonium chloride
 100-36-7, N,N-Diethylethylenediamine 100-37-8,
 Diethylaminoethanol 100-39-0, Benzyl bromide 100-41-4,
 Ethylbenzene, miscellaneous
 (packaging and transport of, stds. for)
 IT 100-42-5, Miscellaneous 100-44-7, Benzyl chloride, miscellaneous
 100-47-0, Benzonitrile, miscellaneous 100-50-5,
 1,2,3,6-Tetrahydrobenzaldehyde 100-57-2, Phenylmercuric
 hydroxide 100-61-8, N-Methylaniline, miscellaneous 100-63-0,
 Phenylhydrazine 100-66-3, Anisole, miscellaneous 100-73-2,
 Acrolein dimer 101-25-7, N,N'-Dinitrosopentamethylenetetramine
 101-68-8 101-77-9, 4,4'-Diaminodiphenyl methane 101-83-7,
 Dicyclohexylamine 102-69-2, Tripropylamine 102-70-5,
 Triallylamine 102-81-8, Dibutylaminoethanol 102-82-9,
 Tributylamine 103-65-1, n-Propylbenzene 103-69-5,
 N-Ethylaniline 103-71-9, Phenylisocyanate, miscellaneous
 103-80-0, Phenylacetyl chloride 103-83-3, Benzyl dimethylamine
 104-15-4, Toluene sulfonic acid, miscellaneous 104-51-8,
 Butylbenzene 104-75-6, 2-Ethylhexylamine 104-78-9 104-90-5,
 2-Methyl-5-ethylpyridine 105-36-2 105-37-3, Ethyl propionate
 105-39-5, Ethyl chloroacetate 105-48-6, Isopropyl chloroacetate
 105-54-4, Ethyl butyrate 105-56-6, Ethyl cyanoacetate
 105-57-7, Acetal 105-58-8, Diethyl carbonate 105-64-6,
 Isopropyl peroxydicarbonate 105-74-8, Lauroyl peroxide
 106-31-0, Butyric anhydride 106-44-5, p-Cresol, miscellaneous
 106-46-7, p-Dichlorobenzene 106-50-3, p-Phenylenediamine,
 miscellaneous 106-51-4, 2,5-Cyclohexadiene-1,4-dione,
 miscellaneous 106-63-8, Isobutyl acrylate 106-68-3, Ethyl amyl
 ketone 106-88-7, 1,2-Butylene oxide 106-89-8, miscellaneous
 106-92-3, Allyl glycidyl ether 106-93-4, Ethylene dibromide
 106-95-6, Allyl bromide, miscellaneous 106-96-7, 3-Bromopropyne
 106-97-8, Butane, miscellaneous 106-97-8D, Butane, mixts.
 106-99-0, 1,3-Butadiene, miscellaneous 107-00-6, Ethylacetylene
 107-02-8, 2-Propenal, miscellaneous 107-05-1, Allyl chloride
 107-06-2, Ethylene dichloride, miscellaneous 107-07-3, Ethylene
 chlorohydrin, miscellaneous 107-10-8, Propylamine, miscellaneous
 107-11-9, Allylamine 107-12-0, Propionitrile 107-13-1,
 Acrylonitrile, miscellaneous 107-14-2, Chloroacetonitrile
 107-15-3, Ethylenediamine, miscellaneous 107-18-6, Allyl
 alcohol, miscellaneous 107-19-7, Propargyl alcohol 107-20-0,
 Chloroacetaldehyde 107-25-5, Vinylmethyl ether 107-29-9,
 Acetaldehyde oxime 107-30-2, Methylchloromethyl ether
 107-31-3, Methyl formate 107-37-9, Allyltrichlorosilane
 107-49-3, Tetraethyl pyrophosphate 107-70-0 107-71-1,
 tert-Butyl peroxyacetate 107-72-2, Amyltrichlorosilane
 107-81-3, 2-Bromopentane 107-82-4, 1-Bromo-3-methylbutane
 107-87-9, Methyl propyl ketone 107-89-1, Aldol 107-92-6,
 Butyric acid, miscellaneous 108-01-0, Dimethylethanolamine
 108-05-4, Acetic acid ethenyl ester, miscellaneous 108-09-8,
 1,3-Dimethylbutylamine 108-10-1, Methyl isobutyl ketone
 108-11-2, Methyl isobutyl carbinol 108-18-9, Diisopropylamine
 108-20-3, Diisopropyl ether 108-21-4, Isopropyl acetate
 108-22-5, Isopropenyl acetate 108-23-6, Isopropyl chloroformate
 108-24-7, Acetic anhydride 108-31-6, 2,5-Furandione,
 miscellaneous 108-39-4, miscellaneous 108-45-2,
 m-Phenylenediamine, miscellaneous 108-46-3, Resorcinol,
 miscellaneous 108-67-8, miscellaneous 108-77-0 108-83-8,
 Diisobutyl ketone 108-84-9 108-86-1, Benzene, bromo-,

miscellaneous 108-87-2, Methyl cyclohexane 108-88-3, Toluene,
 miscellaneous 108-90-7, Chlorobenzene, miscellaneous 108-91-8,
 Cyclohexylamine, miscellaneous 108-94-1, Cyclohexanone,
 miscellaneous 108-95-2, **Phenol**, miscellaneous
 108-98-5, Phenyl mercaptan, miscellaneous 109-02-4 109-09-1,
 2-Chloropyridine 109-13-7, tert-Butyl peroxyisobutyrate
 109-52-4, Valeric acid, miscellaneous 109-53-5, Vinyl isobutyl
 ether 109-60-4, n-Propyl acetate 109-61-5, n-Propyl
 chloroformate 109-63-7, Boron trifluoride diethyl etherate
 109-65-9, n-Butyl bromide 109-66-0, Pentane, miscellaneous
 109-70-6, 1-Chloro-3-bromopropane 109-73-9, n-Butylamine,
 miscellaneous 109-74-0, Butyronitrile 109-77-3, Malononitrile
 109-79-5, Butyl mercaptan 109-86-4, Ethylene glycol monomethyl
 ether 109-87-5, Methylal 109-89-7, Diethylamine, miscellaneous
 109-90-0, Ethyl isocyanate 109-92-2, Vinyl ethyl ether
 109-93-3, Divinyl ether 109-94-4, Ethyl formate 109-95-5,
 Ethyl nitrite 109-99-9, Tetrahydrofuran, miscellaneous
 110-00-9, Furan 110-01-0, Tetrahydrothiophene 110-02-1,
 Thiophene 110-12-3, 5-Methylhexan-2-one 110-16-7, Maleic acid,
 miscellaneous 110-18-9 110-19-0 110-22-5, Diacetyl peroxide
 110-43-0, Amyl methyl ketone 110-49-6 110-54-3, Hexane,
 miscellaneous 110-58-7, Amylamine 110-62-3, Valeraldehyde
 110-66-7, Amyl mercaptan 110-68-9, N-Methylbutylamine
 110-69-0, Butyraldoxime 110-71-4, 1,2-Dimethoxyethane
 110-74-7, Propyl formate 110-78-1, n-Propyl isocyanate
 110-80-5, Ethylene glycol monoethyl ether 110-82-7, Cyclohexane,
 miscellaneous 110-83-8, Cyclohexene, miscellaneous 110-85-0,
 Piperazine, miscellaneous 110-86-1, Pyridine, miscellaneous
 110-87-2 110-89-4, Piperidine, miscellaneous 110-91-8,
 Morpholine, miscellaneous 110-96-3, Diisobutylamine 111-15-9,
 Ethylene glycol monoethyl ether acetate 111-34-2, Butylvinyl
 ether 111-36-4, n-Butyl isocyanate 111-40-0 111-43-3,
 Dipropyl ether 111-49-9, Hexamethylenimine 111-65-9, Octane,
 miscellaneous 111-69-3, Adiponitrile 111-71-7, n-Heptaldehyde
 111-76-2, Ethylene glycol monobutyl ether 111-92-2,
 Di-n-butylamine 112-04-9 112-24-3, Triethylenetetramine
 112-57-2 115-07-1, Propylene, miscellaneous 115-10-6, Dimethyl
 ether 115-11-7, Isobutylene, miscellaneous 115-21-9,
 Ethyltrichlorosilane 115-25-3, Octafluorocyclobutane 116-14-3,
 Tetrafluoroethylene, miscellaneous 116-15-4, Hexafluoropropylene
 116-16-5, Hexachloroacetone 116-54-1, Methyl dichloroacetate
 118-74-1, Hexachlorobenzene 118-96-7, Trinitrotoluene
 120-92-3, Cyclopentanone 121-43-7, Trimethyl borate 121-44-8,
 Triethylamine, miscellaneous 121-45-9, Trimethyl phosphite
 121-46-0, 2,5-Norbornadiene 121-69-7, N,N-Dimethylaniline,
 miscellaneous 121-73-3 121-82-4, Cyclotrimethylenetrinitramine
 122-51-0, Ethyl orthoformate 122-52-1, Triethyl phosphite
 123-00-2, 4-Morpholinepropanamine 123-15-9 123-19-3,
 Dipropylketone 123-20-6, Vinyl butyrate 123-23-9, Succinic
 acid peroxide 123-30-8, p-**Aminophenol** 123-31-9,
 Hydroquinone, miscellaneous 123-38-6, Propionaldehyde,
 miscellaneous 123-42-2, Diacetone alcohol 123-54-6,
 2,4-Pentanedione, miscellaneous 123-62-6, Propionic anhydride
 123-63-7, Paraldehyde 123-72-8, Butyraldehyde 123-75-1,
 Pyrrolidine, miscellaneous 123-86-4, Butyl acetate 123-91-1,
 Dioxane, miscellaneous 124-02-7, Diallylamine 124-09-4,
 Hexamethylenediamine, miscellaneous 124-13-0, Octyl aldehyde
 124-18-5, n-Decane 124-38-9, Carbon dioxide, miscellaneous
 124-40-3, Dimethylamine, miscellaneous 124-41-4, Sodium
 methyate 124-43-6 124-47-0, Urea nitrate 124-65-2, Sodium

cacodylate 126-98-7, Methacrylonitrile 126-99-8, Chloroprene 127-18-4, Tetrachloroethylene, miscellaneous 127-85-5, Sodium arsanilate 129-79-3 131-52-2, Sodium pentachlorophenate 131-73-7, Hexanitrodiphenylamine 131-74-8, Ammonium picrate 133-14-2 133-55-1, N,N'-Dinitroso-N,N'-dimethyl terephthalamide 134-32-7, α -Naphthylamine 138-86-3, Dipentene 138-89-6 139-02-6, Sodium phenolate 140-29-4, Phenylacetone nitrile 140-31-8, 1-Piperazineethanamine 140-80-7 140-88-5 141-32-2

(packaging and transport of, stds. for)

IT 141-43-5, Ethanolamine, miscellaneous 141-57-1, Propyltrichlorosilane 141-59-3, tert-Octylmercaptan 141-75-3, Butyryl chloride 141-78-6, Ethyl acetate, miscellaneous 141-79-7, Mesityl oxide 142-04-1, Aniline hydrochloride 142-29-0, Cyclopentene 142-62-1, Hexanoic acid, miscellaneous 142-82-5, Heptane, miscellaneous 142-84-7, Dipropylamine 142-96-1, Dibutyl ether 143-33-9, Sodium cyanide 144-49-0, Fluoroacetic acid 144-62-7D, Ethanedioic acid, salts 146-84-9, Silver picrate 149-74-6, Methylphenyldichlorosilane 151-50-8, Potassium cyanide 151-56-4, Ethylenimine, miscellaneous 156-62-7, Calcium cyanamide 260-94-6, Acridine 283-66-9, Hexamethylene triperoxide diamine 287-23-0, Cyclobutane 287-92-3, Cyclopentane 291-64-5, Cycloheptane 298-00-0, Methyl parathion 298-07-7 302-01-2, Hydrazine, miscellaneous 309-00-2, Aldrin 352-93-2, Diethyl sulfide 353-36-6, Ethyl fluoride 353-42-4, Boron trifluoride dimethyl etherate 353-50-4, Carbonyl fluoride 353-59-3 354-32-5, Trifluoroacetylchloride 357-57-3, Brucine 360-89-4, Octafluorobut-2-ene 428-59-1, Hexafluoropropylene oxide 431-03-8, Butanedione 460-19-5, Cyanogen 462-06-6, Fluorobenzene 462-08-8, m-Aminopyridine 462-95-3, Diethoxymethane 463-04-7, Amyl nitrite 463-49-0, Propadiene 463-58-1, Carbonyl sulfide 463-71-8, Thiophosgene 463-82-1, 2,2-Dimethylpropane 479-45-8 501-53-1, Benzyl chloroformate 502-98-7D, salts 503-74-2, Isopentanoic acid 504-24-5, 4-Pyridinamine 504-29-0, 2-Pyridinamine 506-64-9, Silver cyanide (Ag(CN)) 506-68-3, Cyanogen bromide 506-77-4, Cyanogen chloride 506-85-4, Fulminic acid 506-93-4, Guanidine nitrate 506-96-7, Acetyl bromide 507-02-8, Acetyl iodide 507-09-5, Thioacetic acid, miscellaneous 507-70-0, Borneol 509-14-8, Tetranitromethane 512-85-6, Ascaridole 513-35-9, 2-Methyl-2-butene 513-38-2 513-42-8, Methallyl alcohol 513-48-4, 2-Iodobutane 513-86-0, Acetyl methyl carbinol 517-25-9, Trinitromethane 517-92-0, 1,8-Dihydroxy-2,4,5,7-tetranitroanthraquinone 519-44-8D, 2,4-Dinitroresorcinol, heavy metal salts 532-27-4, Chloracetophenone 533-51-7, Silver oxalate 534-07-6, 1,3-Dichloroacetone 534-15-6, 1,1-Dimethoxyethane 534-22-5, 2-Methylfuran 535-13-7, Ethyl-2-chloropropionate 540-18-1, Amyl butyrate 540-42-1, Isobutyl propionate 540-54-5, Propyl chloride 540-67-0, Ethyl methyl ether 540-73-8 540-82-9, Ethylsulfuric acid 540-84-1, Isooctane 541-41-3, Ethyl chloroformate 542-55-2, Isobutyl formate 542-62-1, Barium cyanide 542-88-1, Dichlorodimethyl ether, symmetrical 543-27-1, Isobutyl chloroformate 543-59-9, Amyl chloride 544-16-1, Butyl nitrite 544-25-2, Cycloheptatriene 544-97-8, Dimethyl zinc 545-55-1, Tris(1-aziridinyl)phosphine oxide 554-12-1, Methyl propionate 554-84-7, m-Nitrophenol 555-54-4, Magnesium diphenyl 556-24-1, Methyl isovalerate 556-56-9, Allyl iodide 556-61-6, Methyl isothiocyanate 556-88-7 556-89-8, Nitrourea 557-17-5,

Methyl propyl ether 557-19-7, Nickel cyanide (Ni(CN)₂)
 557-20-0, Diethylzinc 557-21-1, Zinc cyanide 557-31-3, Allyl
 ethyl ether 557-40-4, Diallylether 557-98-2, 2-Chloropropene
 558-13-4, Carbon tetrabromide 563-45-1, 3-Methyl-1-butene
 563-46-2, 2-Methyl-1-butene 563-47-3, Methyl allyl chloride
 563-80-4, 3-Methylbutan-2-one 578-54-1, 2-Ethylaniline
 578-94-9, Diphenylamine chloroarsine 582-61-6, Benzoyl azide
 583-15-3, Mercury benzoate 584-79-2, Allethrin 585-79-5,
 1-Bromo-3-nitrobenzene 586-62-9, Terpinolene 587-85-9D,
 compds. 590-01-2, Butylpropionate 590-36-3,
 2-Methylpentan-2-ol 591-27-5, m-Aminophenol
 591-87-7, Allyl acetate 591-89-9, Mercuric potassium cyanide
 592-01-8, Calcium cyanide 592-05-2, Lead cyanide (Pb(CN)₂)
 592-34-7, n-Butylchloroformate 592-41-6, 1-Hexene, miscellaneous
 592-55-2, 2-Bromoethyl ethyl ether 592-63-2 592-84-7,
 n-Butylformate 593-53-3, Methyl fluoride 593-60-2, Vinyl
 bromide 593-89-5, Methylchloroarsine 594-42-3,
 Perchloromethylmercaptan 594-72-9, 1,1-Dichloro-1-nitroethane
 598-14-1, Ethylchloroarsine 598-21-0, Bromoacetyl bromide
 598-31-2, Bromoacetone 598-57-2, Methyl nitramine 598-57-2D,
 Methyl nitramine, metal salts 598-58-3, Methyl nitrate
 598-73-2, Bromotrifluoroethylene 598-78-7, α-
 Chloropropionic acid 598-99-2, Methyl trichloroacetate
 602-96-0, 1,3,5-Trimethyl-2,4,6-trinitrobenzene 602-99-3,
 Trinitro-m-cresol 602-99-3D, Methyl picric acid, heavy metal
 salts 608-50-4, 2,4-Dinitro-1,3,5-trimethylbenzene 610-38-8,
 4-Bromo-1,2-dinitrobenzene 616-38-6, Dimethyl carbonate
 616-74-0D, 4,6-Dinitroresorcinol, heavy metal salts 617-37-8
 617-50-5, Isopropyl isobutyrate 617-89-0, Furfurylamine
 619-97-6, Benzene diazonium nitrate 620-05-3, Benzyl iodide
 622-44-6, Phenylcarbylamine chloride 622-45-7, Cyclohexyl
 acetate 623-42-7, Methyl butyrate 623-87-0,
 Glycerol-1,3-dinitrate 624-61-3, Dibromoacetylene 624-74-8,
 Diiodoacetylene 624-83-9, Methyl isocyanate 624-91-9, Methyl
 nitrite 624-92-0, Dimethyl disulfide 625-76-3, Dinitromethane
 626-67-5, 1-Methylpiperidine 627-13-4, n-Propyl nitrate
 627-30-5 627-63-4, Fumaryl chloride 628-28-4, Butyl methyl
 ether 628-32-0, Ethyl propyl ether 628-63-7, Amyl acetate
 628-81-9, Ethyl butyl ether 628-86-4, Mercury fulminate
 628-92-2, Cycloheptene 628-96-6, Ethylene glycol dinitrate
 629-13-0, 1,2-Diazidoethane 629-14-1 629-20-9,
 Cyclooctatetraene 630-08-0, Carbon monoxide, miscellaneous
 630-72-8, Trinitroacetonitrile 637-78-5, Isopropyl propionate
 638-11-9, Isopropyl butyrate 638-29-9, Valeryl chloride
 638-49-3, Amyl formate 641-16-7, 2,3,4,6-
Tetranitrophenol 644-31-5, Acetyl benzoyl peroxide
 644-97-3, Phenyl phosphorus dichloride 645-55-6, N-Nitroaniline
 646-06-0, Dioxolane 674-81-7, Nitrosoguanidine 674-82-8,
 Diketene 676-83-5, Methyl phosphonous dichloride 676-97-1,
 Methyl phosphonic dichloride 676-98-2, Methyl phosphonothioic
 dichloride 677-71-4, Hexafluoroacetone hydrate 681-84-5,
 Methyl orthosilicate 684-16-2, Hexafluoroacetone 693-21-0,
 Diethylene glycol dinitrate 694-05-3, 1,2,3,6-Tetrahydropyridine
 757-58-4, Hexaethyl tetraphosphate 762-12-9, Decanoyl peroxide
 762-13-0, Pelargonyl peroxide 762-16-3 765-34-4,
 Glycidaldehyde 766-09-6, 1-Ethylpiperidine 771-29-9, Tetralin
 hydroperoxide 776-74-9, Diphenylmethyl bromide 814-78-8,
 Methyl isopropenyl ketone 822-06-0 831-52-7, Sodium picramate
 883-40-9, Diazodiphenylmethane 918-37-6, Hexanitroethane
 918-54-7, Trinitroethanol 926-63-6 926-64-7,

2-Dimethylaminoacetonitrile 928-65-4, Hexyltrichlorosilane
 929-06-6, 2-(2-Aminoethoxy)ethanol 993-00-0, Methylchlorosilane
 993-12-4 993-43-1, Ethyl phosphonothioic dichloride 1002-16-0,
 Amyl nitrate 1070-19-5, tert-Butoxycarbonyl azide 1120-21-4,
 Undecane 1125-27-5 1126-78-9 1187-93-5, Perfluoromethyl
 vinyl ether 1299-86-1, Aluminum carbide 1300-64-7, Anisoyl
 chloride 1300-71-6, Xylenol 1300-73-8D, derivs. 1303-28-2,
 Arsenic pentoxide 1303-33-9, Arsenic sulfide
 (packaging and transport of, stds. for)
 IT 1303-33-9D, Arsenic sulfide, mixture with chlorates 1304-28-5,
 Barium oxide, miscellaneous 1304-29-6, Barium peroxide
 1305-78-8, Calcium oxide, miscellaneous 1305-79-9, Calcium
 peroxide 1305-99-3, Calcium phosphide 1309-60-0, Lead dioxide
 1310-58-3, Potassium hydroxide, miscellaneous 1310-65-2, Lithium
 hydroxide 1310-73-2, Sodium hydroxide, miscellaneous
 1310-82-3, Rubidium hydroxide 1312-73-8, Potassium sulfide
 1313-60-6, Sodium peroxide 1313-82-2, Sodium sulfide,
 miscellaneous 1314-18-7, Strontium peroxide 1314-22-3, Zinc
 peroxide 1314-24-5, Phosphorus trioxide 1314-34-7, Vanadium
 trioxide 1314-56-3, Phosphorus pentoxide, miscellaneous
 1314-62-1, Vanadium pentoxide, miscellaneous 1314-80-3,
 Phosphorus sulfide (P2S5) 1314-84-7, Zinc phosphide 1314-85-8,
 Phosphorus sesquisulfide 1319-77-3, Cresylic acid 1320-37-2,
 Dichlorotetrafluoroethane 1321-10-4, Chlorocresol 1321-31-9,
 Phenetidine 1327-53-3, Arsenic trioxide 1330-20-7, Xylene,
 miscellaneous 1330-45-6, Chlorotrifluoroethane 1330-78-5,
 Tricresyl phosphate 1331-22-2, Methyl cyclohexanone 1332-12-3,
 Fulminating gold 1332-37-2, Iron oxide, properties 1333-39-7,
 Phenolsulfonic acid 1333-41-1, Picoline 1333-74-0,
 Hydrogen, miscellaneous 1333-82-0, Chromium trioxide
 1333-83-1, Sodium hydrogen fluoride 1335-26-8, Magnesium
 peroxide 1335-31-5, Mercury oxycyanide 1335-85-9,
 Dinitro-o-cresol 1336-21-6, Ammonium hydroxide 1337-81-1
 1338-23-4, Methyl ethyl ketone peroxide 1341-24-8,
 Chloroacetophenone 1341-49-7, Ammonium hydrogen fluoride
 1344-40-7, Lead phosphite, dibasic 1344-67-8, Copper chloride
 1498-40-4, Ethyl phosphonous dichloride 1498-51-7, Ethyl
 phosphorodichloridate 1569-69-3, Cyclohexyl mercaptan
 1609-86-5, tert-Butyl isocyanate 1623-15-0 1623-24-1,
 Isopropyl acid phosphate 1634-04-4, Methyl-tert-butyl ether
 1693-71-6, Triallyl borate 1705-60-8, 2,2-Di(4,4-di-tert-
 butylperoxycyclohexyl)propane 1712-64-7, Isopropyl nitrate
 1719-53-5, Diethyldichlorosilane 1737-93-5, 3,5-Dichloro-2,4,6-
 trifluoropyridine 1789-58-8, Ethyldichlorosilane 1795-48-8,
 Isopropyl isocyanate 1838-59-1, Allyl formate 1873-29-6,
 Isobutyl isocyanate 1885-14-9, Phenylchloroformate 1947-27-9,
 Arsenic trichloride 2050-92-2, Di-n-amylamine 2094-98-6,
 1,1'-Azodi(hexahydrobenzonitrile) 2144-45-8, Dibenzyl
 peroxydicarbonate 2155-71-7 2167-23-9, 2,2-Di(tert-
 butylperoxy)butane 2217-06-3, Dipicryl sulfide 2243-94-9,
 1,3,5-Trinitronaphthalene 2244-21-5, Potassium
 dichloroisocyanurate 2294-47-5, p-Diazidobenzene 2312-76-7
 2338-12-7, 5-Nitrobenzotriazole 2487-90-3, Trimethoxysilane
 2508-19-2, Trinitrobenzenesulfonic acid 2524-03-0, Dimethyl
 chlorothiophosphate 2524-04-1, Diethylthiophosphoryl chloride
 2549-51-1, Vinyl chloroacetate 2551-62-4, Sulfur hexafluoride
 2567-83-1, Tetraethylammonium perchlorate 2657-00-3, Sodium
 2-diazo-1-naphthol-5-sulfonate 2691-41-0,
 Cyclotetramethylenetetranitramine 2696-92-6, Nitrosyl chloride
 2699-79-8, Sulfuryl fluoride 2782-57-2, Dichloroisocyanuric acid

2782-57-2D, Dichloroisocyanuric acid, salts 2820-51-1, Nicotine hydrochloride 2825-15-2 2855-13-2, Isophoronediamine 2867-47-2, Dimethylaminoethyl methacrylate 2893-78-9, Sodium dichloroisocyanurate 2937-50-0, Allyl chloroformate 2941-64-2, Ethyl chlorothioformate 2980-64-5 3025-88-5, 2,5-Dimethyl-2,5-dihydroperoxy hexane 3031-74-1, Ethyl hydroperoxide 3032-55-1 3054-95-3, 3,3-Diethoxypropene 3087-37-4, Tetrapropylorthotitanate 3129-90-6, Isothiocyanic acid 3129-91-7, Dicyclohexylammonium nitrite 3132-64-7, Epibromohydrin 3165-93-3, 4-Chloro-o-toluidine hydrochloride 3173-53-3, Cyclohexyl isocyanate 3179-56-4, Acetyl cyclohexanesulfonyl peroxide 3188-13-4, Chloromethyl ethyl ether 3248-28-0, Dipropionyl peroxide 3268-49-3 3275-73-8, Nicotine tartrate 3282-30-2, Trimethylacetyl chloride 3497-00-5, Phenyl phosphorus thiodichloride 3689-24-5 3724-65-0, Crotonic acid 3811-04-9, Potassium chlorate 3926-62-3, Sodium chloroacetate 3982-91-0, Thiophosphoryl chloride 4016-11-9, 1,2-Epoxy-3-ethoxypropane 4098-71-9 4109-96-0, Dichlorosilane 4170-30-3, Crotonaldehyde 4300-97-4 4316-42-1, N-n-Butylimidazole 4419-11-8, 2,2'-Azodi(2,4-dimethylvaleronitrile) 4421-50-5 4435-53-4, Butoxyl 4452-58-8, Sodium percarbonate 4472-06-4, Carbonazidodithioic acid 4484-72-4, Dodecyltrichlorosilane 4528-34-1 4547-70-0 4591-46-2 4682-03-5, Diazodinitrophenol 4795-29-3, Tetrahydrofurfurylamine 4904-61-4, 1,5,9-Cyclododecatriene 5283-66-9, Octyltrichlorosilane 5283-67-0, Nonyltrichlorosilane 5329-14-6, Sulfamic acid 5419-55-6, Triisopropyl borate 5610-59-3, Silver fulminate 5637-83-2, Cyanuric triazide 5653-21-4 5894-60-0, Hexadecyltrichlorosilane 5970-32-1, Mercury salicylate 6023-29-6 6275-02-1 6423-43-4 6427-21-0, Methoxymethyl isocyanate 6484-52-2, Nitric acid ammonium salt, properties 6484-52-2D, Ammonium nitrate, mixts. with fuel oils 6505-86-8, Nicotine sulfate 6659-60-5, 1,2,4-Butanetriol trinitrate 6842-15-5, Propylene tetramer 6867-30-7, Lithium acetylde ethylenediamine complex 7304-92-9 7332-16-3, Inositol hexanitate 7429-90-5, Aluminum, miscellaneous 7429-90-5D, Aluminum, alkyl derivs. 7439-90-9, Krypton, miscellaneous 7439-92-1D, Lead, compds. 7439-93-2, Lithium, miscellaneous 7439-93-2D, Lithium, alkyl derivs. 7439-95-4, Magnesium, miscellaneous 7439-95-4D, Magnesium, alkyl derivs. 7439-97-6, Mercury, miscellaneous 7439-97-6D, Mercury, compds. 7440-01-9, Neon, miscellaneous 7440-09-7, Potassium, miscellaneous 7440-17-7, Rubidium, miscellaneous 7440-21-3, Silicon, miscellaneous 7440-23-5, Sodium, miscellaneous 7440-28-0D, Thallium, compds. 7440-29-1, Thorium, miscellaneous 7440-31-5D, Tin, organic compds. 7440-32-6, Titanium, properties 7440-36-0, Antimony, miscellaneous 7440-36-0D, Antimony, inorg. and organic compds. 7440-37-1, Argon, miscellaneous 7440-38-2, Arsenic, miscellaneous 7440-39-3, Barium, miscellaneous 7440-39-3D, Barium, alloys 7440-39-3D, Barium, compds. 7440-41-7, Beryllium, miscellaneous 7440-41-7D, Beryllium, compds. 7440-43-9D, Cadmium, compds. 7440-44-0, Carbon, miscellaneous 7440-45-1, Cerium, miscellaneous 7440-46-2, Cesium, miscellaneous 7440-55-3, Gallium, miscellaneous 7440-58-6, Hafnium, miscellaneous 7440-59-7, Helium, miscellaneous 7440-61-1, Uranium, miscellaneous 7440-63-3, Xenon, miscellaneous 7440-66-6, Zinc, miscellaneous 7440-67-7, Zirconium, miscellaneous 7440-70-2, Calcium, miscellaneous 7440-70-2D, Calcium, alloys 7446-09-5, Sulfur dioxide, miscellaneous 7446-11-9, Sulfur trioxide, miscellaneous

7446-14-2, Lead sulfate 7446-18-6, Thallium sulfate 7446-70-0,
 Aluminum chloride (AlCl₃), miscellaneous 7487-94-7, Mercuric
 chloride, miscellaneous 7488-56-4, Selenium disulfide
 7521-80-4, Butyltrichlorosilane 7550-45-0, Titanium
 tetrachloride, miscellaneous 7570-26-5, 1,2-Dinitroethane
 7572-29-4, Dichloroacetylene 7578-36-1 7580-67-8, Lithium
 hydride 7601-89-0, Sodium perchlorate 7601-90-3, Perchloric
 acid, miscellaneous 7616-94-6, Perchloryl fluoride 7631-89-2,
 Sodium arsenate 7631-99-4, Sodium nitrate, miscellaneous
 7632-00-0, Sodium nitrite 7632-51-1, Vanadium tetrachloride
 7637-07-2, Boron trifluoride, miscellaneous 7645-25-2, Lead
 arsenate 7646-69-7, Sodium hydride 7646-78-8, Stannic
 chloride, miscellaneous 7646-85-7, Zinc chloride, miscellaneous
 7646-93-7, Potassium hydrogen sulfate 7647-01-0, Hydrogen
 chloride, miscellaneous 7647-18-9, Antimony pentachloride
 7647-19-0, Phosphorus pentafluoride 7664-38-2, Phosphoric acid,
 miscellaneous 7664-38-2D, Phosphoric acid, esters 7664-39-3,
 Hydrogen fluoride, miscellaneous 7664-41-7, Ammonia,
 miscellaneous 7664-93-9, Sulfuric acid, miscellaneous
 7681-38-1, Sodium hydrogen sulfate 7681-49-4, Sodium fluoride,
 miscellaneous 7681-52-9, Sodium hypochlorite 7697-37-2, Nitric
 acid, miscellaneous 7704-34-9, Sulfur, miscellaneous
 (packaging and transport of, stds. for)
 IT 7705-07-9D, Titanium trichloride, mixts. 7705-08-0, Ferric
 chloride, miscellaneous 7718-98-1, Vanadium trichloride
 7719-09-7, Thionyl chloride 7719-12-2, Phosphorus trichloride
 7722-64-7, Potassium permanganate 7722-84-1, Hydrogen peroxide
 (H₂O₂), miscellaneous 7723-14-0, Phosphorus, miscellaneous
 7726-95-6, Bromine, miscellaneous 7727-15-3, Aluminum bromide
 7727-18-6, Vanadium oxytrichloride 7727-21-1, Potassium
 persulfate 7727-37-9, Nitrogen, miscellaneous 7727-37-9D,
 Nitrogen, mixts. with rare gases 7727-54-0, Ammonium persulfate
 7738-94-5, Chromic acid (H₂CrO₄) 7756-94-7, Triisobutylene
 7757-79-1, Potassium nitrate, miscellaneous 7758-01-2, Potassium
 bromate 7758-09-0, Potassium nitrite 7758-19-2, Sodium
 chlorite 7758-94-3, Ferrous chloride 7761-88-8, Silver
 nitrate, miscellaneous 7773-03-7, Potassium bisulfite
 7775-09-9, Sodium chlorate 7775-14-6, Sodium dithionite
 7778-39-4, Arsenic acid 7778-44-1, Calcium arsenate 7778-54-3,
 Calcium hypochlorite 7778-66-7 7778-74-7, Potassium
 perchlorate 7779-86-4, Zinc dithionite 7779-88-6, Zinc nitrate
 7782-39-0, Deuterium, miscellaneous 7782-41-4, Fluorine,
 miscellaneous 7782-44-7, Oxygen, miscellaneous 7782-44-7D,
 Oxygen, mixts. with rare gases 7782-49-2, Selenium,
 miscellaneous 7782-50-5, Chlorine, miscellaneous 7782-65-2,
 Germane 7782-78-7, Nitrosylsulfuric acid 7782-79-8D, Hydrazoic
 acid, copper complexes 7782-99-2, Sulfurous acid, miscellaneous
 7783-06-4, Hydrogen sulfide, miscellaneous 7783-07-5, Hydrogen
 selenide (H₂Se) 7783-08-6, Selenic acid 7783-33-7 7783-41-7,
 Oxygen difluoride 7783-54-2, Nitrogen trifluoride 7783-56-4,
 Antimony trifluoride 7783-60-0, Sulfur tetrafluoride
 7783-61-1, Silicon tetrafluoride 7783-66-6, Iodine pentafluoride
 7783-70-2, Antimony pentafluoride 7783-79-1, Selenium
 hexafluoride 7783-80-4, Tellurium hexafluoride 7783-81-5,
 Uranium hexafluoride 7783-82-6, Tungsten hexafluoride
 7783-91-7, Silver chlorite 7784-08-9 7784-21-6, Aluminum
 hydride 7784-30-7, Aluminum phosphate 7784-42-1, Arsine
 7784-46-5, Sodium arsenite 7786-30-3D, Magnesium chloride
 (MgCl₂), mixture with chlorates 7787-36-2, Barium permanganate
 7787-41-9, Barium selenate 7787-71-5, Bromine trifluoride

7788-97-8, Chromic fluoride 7789-09-5, Ammonium dichromate
 7789-18-6, Cesium nitrate 7789-21-1, Fluorosulfonic acid
 7789-23-3, Potassium fluoride 7789-29-9, Potassium bifluoride
 7789-30-2, Bromine pentafluoride 7789-38-0, Sodium bromate
 7789-59-5, Phosphorus oxybromide 7789-60-8, Phosphorus
 tribromide 7789-61-9, Antimony tribromide 7789-69-7,
 Phosphorus pentabromide 7789-78-8, Calcium hydride 7790-59-2
 7790-69-4, Lithium nitrate 7790-91-2, Chlorine trifluoride
 7790-93-4, Chloric acid 7790-94-5, Chlorosulfonic acid
 7790-98-9, Ammonium perchlorate 7790-99-0, Iodine monochloride
 7791-10-8, Strontium chlorate 7791-23-3, Selenium oxychloride
 7791-25-5, Sulfuryl chloride 7791-27-7, Disulfuryl chloride
 7803-51-2, Phosphine 7803-52-3, Stibine 7803-54-5, Magnesium
 diamide 7803-55-6, Ammonium metavanadate 7803-57-8, Hydrazine
 hydrate 7803-62-5, Silane, miscellaneous 7803-63-6, Ammonium
 hydrogen sulfate 8004-09-9 8006-19-7, Amatol 8006-28-8, Soda
 lime 8007-56-5, Nitrohydrochloric acid 8007-58-7 8012-74-6,
 London Purple 8014-95-7, Fuming sulfuric acid 8049-17-0,
 Ferrosilicon 8050-88-2, Celluloid 8063-77-2 8065-53-0,
 Hexolite 8066-33-9, Pentolite 8070-50-6 9003-53-6,
 Polystyrene 9004-70-0, Collodion 9056-38-6, Nitrostarch
 9080-17-5, Ammonium polysulfide 10022-31-8, Barium nitrate
 10024-97-2, Nitrogen oxide (N₂O), properties 10025-78-2,
 Trichlorosilane 10025-85-1, Nitrogen trichloride 10025-87-3,
 Phosphorus oxychloride 10025-91-9, Antimony trichloride
 10026-04-7, Silicon tetrachloride 10026-11-6, Zirconium
 tetrachloride 10026-13-8, Phosphorus pentachloride 10031-13-7
 10031-87-5, 2-Ethylbutyl acetate 10034-81-8, Magnesium
 perchlorate 10034-85-2, Hydrogen iodide 10035-10-6, Hydrogen
 bromide, miscellaneous 10039-54-0, Hydroxylamine sulfate
 10042-76-9, Strontium nitrate 10045-94-0, Mercuric nitrate
 10049-04-4, Chlorine dioxide 10099-74-8, Lead nitrate
 10101-50-5 10102-06-4, Uranyl nitrate 10102-12-2, Selenium
 nitride 10102-18-8, Sodium selenite 10102-43-9, Nitric oxide,
 miscellaneous 10102-44-0, Nitrogen dioxide, miscellaneous
 10102-49-5, Ferric arsenate 10102-50-8, Ferrous arsenate
 10103-50-1, Magnesium arsenate 10118-76-0 10124-37-5, Calcium
 nitrate 10124-48-8, Mercury ammonium chloride 10124-50-2,
 Potassium arsenite 10137-74-3, Calcium chlorate 10192-29-7,
 Ammonium chlorate 10241-05-1, Molybdenum pentachloride
 10256-53-8, Methanamine, compound with trinitromethane,
 miscellaneous 10294-33-4, Boron tribromide 10294-34-5, Boron
 trichloride 10306-83-9 10326-21-3, Magnesium chlorate
 10326-24-6 10361-95-2, Zinc chlorate 10377-60-3, Magnesium
 nitrate 10377-66-9, Manganese nitrate 10415-75-5, Mercurous
 nitrate 10421-48-4, Ferric nitrate 10431-47-7 10544-63-5,
 Ethyl crotonate 11069-19-5, Dichlorobutene 11071-47-9,
 Isooctene 11099-22-2 11105-16-1, Zirconium hydride
 11122-26-2 11135-81-2 11138-49-1, Sodium aluminate
 11140-68-4, Titanium hydride 12001-29-5, Chrysotile
 12002-19-6, Mercury nucleate 12002-48-1, Trichlorobenzene
 12030-88-5, Potassium superoxide 12031-80-0, Lithium peroxide
 12033-49-7, Nitrogen trioxide 12034-12-7, Sodium superoxide
 12057-74-8, Magnesium phosphide (Mg₃P₂) 12125-01-8, Ammonium
 fluoride 12135-76-1, Ammonium sulfide 12136-15-1, Mercury
 nitride 12164-94-2, Ammonium azide 12167-20-3, Nitrocresol
 12172-67-7, Actinolite 12401-70-6, Potassium monoxide
 12401-86-4, Sodium monoxide 12427-38-2, Maneb 12440-42-5, Tin
 phosphide (Sn₃P₄) 12504-16-4, Strontium phosphide (Sr₃P₂)
 12627-52-0, Antimony sulfide 12627-52-0D, Antimony sulfide,

mixture with chlorates 12640-89-0, Selenium oxide 12653-71-3,
 Mercury oxide 12737-18-7, Calcium silicide 12751-03-0, Cordite
 12771-08-3, Sulfur chloride 12789-46-7, Amyl acid phosphate
 13092-75-6, Silver acetylide 13138-45-9 13225-10-0,
 α -Methylglucoside tetranitrate 13319-75-0, Boron
 trifluoride dihydrate 13410-01-0, Sodium selenate 13424-46-9,
 Lead azide 13426-91-0, Cupriethylenediamine 13437-80-4,
 Mercuric arsenate 13444-85-4, Nitrogen triiodide 13446-10-i,
 Ammonium permanganate 13446-48-5, Ammonium nitrite 13450-97-0,
 Strontium perchlorate 13453-30-0, Thallium chlorate
 13463-39-3, Nickel carbonyl 13463-40-6, Iron pentacarbonyl
 13464-33-0, Zinc arsenate 13464-58-9D, Arsenous acid, copper
 complexes 13465-73-1, Bromosilane 13465-95-7, Barium
 perchlorate 13472-08-7 13473-90-0, Aluminum nitrate
 13477-00-4, Barium chlorate 13477-10-6, Barium hypochlorite
 13477-36-6, Calcium perchlorate 13520-83-7, Uranyl nitrate
 hexahydrate 13537-32-1, Fluorophosphoric acid 13548-38-4,
 Chromium nitrate 13597-54-1, Zinc selenate 13597-99-4,
 Beryllium nitrate 13598-36-2, Phosphonic acid 13637-63-3,
 Chlorine pentafluoride 13637-76-8, Lead perchlorate 13718-59-7
 13746-89-9, Zirconium nitrate 13762-51-1, Potassium borohydride
 13766-44-4, Mercury sulfate 13769-43-2, Potassium metavanadate
 13770-96-2, Sodium aluminum hydride 13774-25-9 13779-41-4,
 Difluorophosphoric acid 13780-03-5, Calcium bisulfite
 (packaging and transport of, stds. for)
 IT 13823-29-5, Thorium nitrate 13840-33-0, Lithium hypochlorite
 13840-33-0D, Lithium hypochlorite, mixts. 13843-59-9, Ammonium
 bromate 13863-88-2, Silver azide 13967-90-3, Barium bromate
 13973-87-0, Bromine azide 13973-88-1, Chlorine azide
 13987-01-4, Tripropylene 14014-86-9 14019-91-1, Calcium
 selenate 14293-73-3 14448-38-5, Hyponitrous acid 14519-07-4,
 Zinc bromate 14519-17-6, Magnesium bromate 14546-44-2,
 Hydrazine azide 14567-73-8, Tremolite 14644-61-2, Zirconium
 sulfate 14666-78-5, Diethylperoxydicarbonate 14674-72-7,
 Calcium chlorite 14696-82-3, Iodine azide (I(N₃)) 14977-61-8
 15195-06-9 15245-44-0, Lead trinitroresorcinate 15347-57-6,
 Lead acetate 15457-98-4 15512-36-4, Calcium dithionite
 15545-97-8, 2,2'-Azodi(2,4-dimethyl-4-methoxyvaleronitile)
 15598-34-2, Pyridine perchlorate 15718-71-5, Ethylenediamine
 diperchlorate 15825-70-4, Mannitol hexanitrate 15875-44-2,
 Methylamine perchlorate 16215-49-9, Di-n-butyl peroxydicarbonate
 16229-43-9, Vanadyl sulfate 16339-86-9 16646-35-8
 16721-80-5, Sodium hydrosulfide 16753-36-9, Copper acetylide
 16853-85-3, Lithium aluminum hydride 16871-71-9, Zinc
 fluorosilicate 16871-90-2, Potassium fluorosilicate 16872-11-0
 16893-85-9, Sodium fluorosilicate 16901-76-1, Thallium nitrate
 16919-19-0, Ammonium fluorosilicate 16940-66-2, Sodium
 borohydride 16940-81-1, Hexafluorophosphoric acid 16941-12-1,
 Chloroplatinic acid 16949-15-8, Lithium borohydride
 16949-65-8, Magnesium fluorosilicate 16961-83-4, Fluorosilicic
 acid 16962-07-5, Aluminum borohydride 17014-71-0, Potassium
 peroxide 17068-78-9, Anthophyllite 17462-58-7, sec-Butyl
 chloroformate 17639-93-9, Methyl-2-chloropropionate
 17702-41-9, Decaborane 17861-62-0 18130-44-4, Titanium sulfate
 18414-36-3 18810-58-7, Barium azide 19159-68-3 19287-45-7,
 Diborane 19287-45-7D, Diborane, mixts. 19624-22-7, Pentaborane
 20062-22-0 20236-55-9, Barium styphnate 20600-96-8
 20816-12-0, Osmium tetroxide 20820-44-4 20859-73-8, Aluminum
 phosphide 21351-79-1, Cesium hydroxide (Cs(OH)) 21569-01-7
 21723-86-4 21985-87-5, Pentanitroaniline 22128-62-7,

Chloromethylchloroformate 22750-93-2, Ethyl perchlorate
 22751-24-2 22826-61-5 23414-72-4, Zinc permanganate
 23745-86-0, Potassium fluoroacetate 24167-76-8, Sodium phosphide
 24468-13-1, 2-Ethylhexylchloroformate 24884-69-3 25013-15-4,
 Vinyl toluene 25109-57-3 25134-21-8 25136-55-4,
 Dimethyldioxane 25154-42-1, Chlorobutane 25154-54-5,
 Dinitrobenzene 25155-15-1, Cymene 25167-20-8, Tetrabromoethane
 25167-67-3, Butylene 25167-70-8, Diisobutylene 25167-80-0,
Chlorophenol 25168-05-2, Chlorotoluene 25265-68-3,
 Methyltetrahydrofuran 25321-14-6, Dinitrotoluene 25322-01-4,
 Nitropropane 25322-20-7, Tetrachloroethane 25323-30-2,
 Dichloroethylene 25339-56-4, Heptene 25340-17-4,
 Diethylbenzene 25377-72-4, n-Amylene 25496-08-6, Fluorotoluene
 25497-28-3, Difluoroethane 25497-29-4, Chlorodifluoroethane
 25513-64-8 25550-53-2 25550-55-4, Dinitrosobenzene
 25550-58-7, **Dinitrophenol** 25550-58-7D,
Dinitrophenol, salts 25567-67-3, Chlorodinitrobenzene
 25567-68-4, Chloronitrotoluene 25639-42-3, Methylcyclohexanol
 25721-38-4, Lead picrate 25917-35-5, Hexanol 26134-62-3,
 Lithium nitride 26140-60-3D, Terphenyl, halo derivs.
 26249-12-7, Dibromobenzene 26471-56-7, Dinitroaniline
 26471-62-5, Toluene diisocyanate 26506-47-8, Copper chlorate
 26571-79-9 26618-70-2 26628-22-8, Sodium azide 26638-19-7,
 Dichloropropane 26645-10-3 26760-64-5, Isopentene 26762-93-6
 26914-02-3, Iodopropane 26915-12-8, Toluidine 26952-23-8,
 Dichloropropene 26952-42-1, Trinitroaniline 27134-26-5,
 Chloroaniline 27134-27-6, Dichloroaniline 27137-85-5,
 Dichlorophenyltrichlorosilane 27152-57-4 27176-87-0,
 Dodecylbenzenesulfonic acid 27195-67-1, Dimethylcyclohexane
 27215-10-7 27236-46-0, Isohexene 27254-36-0, Nitronaphthalene
 27458-20-4, Butyltoluene 27978-54-7, Hydrazine perchlorate
 27986-95-4 27987-06-0, Trifluoroethane 28260-61-9,
 Trinitrochlorobenzene 28300-74-5, Antimony potassium tartrate
 28324-52-9, Pinane hydroperoxide 28479-22-3 28653-16-9
 28679-16-5, Trimethylhexamethylenediisocyanate 28805-86-9,
Butylphenol 29191-52-4, Anisidine 29306-57-8
 29790-52-1, Nicotine salicylate 29903-04-6 29965-97-7,
 Cyclooctadiene 30236-29-4, Sucrose octanitrate
 30525-89-4, Paraformaldehyde 30553-04-9,
 Naphthylthiourea 30586-10-8, Dichloropentane 30586-18-6,
 Pentamethylheptane 31058-64-7 31212-28-9, Nitrobenzenesulfonic
 acid 33453-96-2 33864-17-4 34216-34-7,
 Trimethylcyclohexylamine 35296-72-1, Butanol 35860-50-5,
 Trinitrobenzoic acid 35860-51-6, Dinitroresorcinol 35884-77-6,
 Xylyl bromide 36472-34-1, Chloropropene 37020-93-2, Mercury
 cyanide (Hg(CN)) 37187-22-7, Acetyl acetone peroxide
 37206-20-5, Methyl isobutyl ketone peroxide 37273-91-9,
 Metaldehyde 37320-91-5, Mercury iodide 37368-10-8, Aluminum
 vanadium oxide 38139-71-8, Bromide chloride 38232-63-2,
 Mercurous azide 38483-28-2, Methylene glycol dinitrate
 39377-49-6, Copper cyanide 39377-56-5, Lead sulfide
 39404-03-0, Magnesium silicide 39409-64-8, TVOPA 39432-81-0
 39455-80-6, Ammonium sodium vanadium oxide 40058-87-5,
 Isopropyl-2-chloropropionate 41195-19-1 41587-36-4,
 Chloronitroaniline 42296-74-2, Hexadiene 43133-95-5,
 Methylpentane 50815-73-1 50874-93-6 51006-59-8 51023-22-4,
 Trichlorobutene 51064-12-1 51312-23-3, Mercury bromide
 51317-24-9, Lead nitroresorcinol 51325-42-9, Copper selenite
 51845-86-4, Ethyl borate 52181-51-8 53014-37-2,
 Tetranitroaniline 53408-91-6, Mercury thiocyanate 53422-49-4

53569-62-3 53839-08-0 53906-68-6 54141-09-2, 1,4,-Butynediol
 54413-15-9, Tritonal 54727-89-8 54958-71-3 55510-04-8,
 Dinitroglycoluril 55810-17-8 56929-36-3 56960-91-9
 57607-37-1, Octolite 58164-88-8, Antimony lactate 58499-37-9
 58933-55-4 59753-21-8 59917-23-6 60168-33-4 60616-74-2,
 Magnesium hydride 60869-68-3 60999-18-0 61061-91-4
 61878-56-6 63085-06-3 63283-80-7, Dichloroisopropyl ether
 63597-41-1, Octadiene 63885-01-8 63907-41-5 63937-14-4
 63938-10-3, Chlorotetrafluoroethane 63988-31-8 64173-96-2
 64973-06-4, Arsenic bromide
 (packaging and transport of, stds. for)

L56 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1991:669531 HCAPLUS

DOCUMENT NUMBER: 115:269531

TITLE: Multi-analyte electrolytic-cell sensor with a permeable membrane

INVENTOR(S): Joseph, Jose P.; Madou, Marc J.

PATENT ASSIGNEE(S): Commtech International, USA

SOURCE: PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

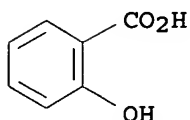
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9111710	A1	19910808	WO 1991-US358	1991 0117
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
US 5183549	A	19930202	US 1990-470954	1990 0126
CA 2074511	AA	19910727	CA 1991-2074511	1991 0117
EP 512070	A1	19921111	EP 1991-904837	1991 0117
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
PRIORITY APPLN. INFO.: US 1990-470954 A				
				1990 0126
WO 1991-US358				W
				1991 0117

AB An electrolytic sensor measures the amts. of ionic and vapor substances in a liquid, where the system has an electrode sensitive to the ionic substance and another electrode sensitive to the vapor substance. A unitary membrane covers the electrodes and the requisite electrolyte with the membrane being permeable to the vapor substance, impermeable to the liquid and having dispersed in it an ionophore which senses the ionic substance via selective transfer into the membrane of a quantity of the ionic substance

determined by the concentration of the ionic substance in the liquid. Such quantities as H⁺, CO₂, and O can be determined by a single electrolytic cell structure.

IT 69-72-7, analysis
(determination of, multi-analyte electrolytic-cell sensor with permeable membrane for)
RN 69-72-7 HCAPLUS
CN Benzoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)

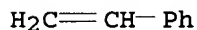


IT 9003-53-6, Polystyrene
(membranes, multi-analyte electrolytic-cell sensors containing)
RN 9003-53-6 HCAPLUS
CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5

CMF C8 H8



IC ICM G01N027-31
CC 79-2 (Inorganic Analytical Chemistry)
IT 61-90-5, L-Leucine, analysis 63-91-2, L-Phenylalanine, analysis
64-19-7, Acetic acid, analysis 65-85-0, Benzoic acid, analysis
69-72-7, analysis 71-50-1, analysis 74-90-8, Hydrogen
cyanide, analysis 124-38-9, Carbon dioxide, analysis 302-04-5,
Thiocyanate, analysis 630-08-0, Carbon monoxide, analysis
1333-74-0, Hydrogen, analysis 7446-09-5, Sulfur dioxide,
analysis 7446-11-9, Sulfur trioxide, analysis 7664-39-3,
Hydrofluoric acid, analysis 7664-41-7, Ammonia, analysis
7727-37-9, Nitrogen, analysis 7782-44-7, Oxygen, analysis
7783-06-4, Hydrogen sulfide, analysis 10024-97-2, Nitrogen oxide
(N₂O), analysis 14797-55-8, Nitrate, analysis 14797-73-0,
Perchlorate 14808-79-8, Sulfate, analysis
(determination of, multi-analyte electrolytic-cell sensor with permeable membrane for)
IT 9002-86-2, Poly(vinyl chloride) 9003-53-6, Polystyrene
9004-35-7 9011-14-7 25037-45-0, Poly(bisphenol-A carbonate)
(membranes, multi-analyte electrolytic-cell sensors containing)

L56 ANSWER 12 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1991:627836 HCAPLUS

DOCUMENT NUMBER: 115:227836

TITLE: Immobilization of ligands by radio-derivatized polymers, and their use in immunoassays and other biological applications

INVENTOR(S): Varga, Janos M.; Fritsch, Peter

PATENT ASSIGNEE(S): Epipharm Allergie-Service G.m.b.H., Austria

SOURCE: PCT Int. Appl., 50 pp.

DOCUMENT TYPE: CODEN: PIXXD2
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: English
 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9102768	A1	19910307	WO 1990-EP1362	1990 0818
W: AU, BR, CA, FI, HU, JP, KR, NO, SU				
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
AT 8901976	A	19931015	AT 1989-1976	1989 0821
AT 397723	B	19940627		
US 5196478	A	19930323	US 1990-507348	1990 0409
CA 2039702	AA	19910222	CA 1990-2039702	1990 0818
AU 9061823	A1	19910403	AU 1990-61823	1990 0818
EP 439585	A1	19910807	EP 1990-912436	1990 0818
EP 439585	B1	19971029		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
JP 04502934	T2	19920528	JP 1990-511733	1990 0818
AT 159745	E	19971115	AT 1990-912436	1990 0818
NO 9101564	A	19910620	NO 1991-1564	1991 0419
NO 176668	B	19950130		
NO 176668	C	19950510		
FI 102079	B1	19981015	FI 1991-1912	1991 0419
PRIORITY APPLN. INFO.:				
			AT 1989-1976	A 1989 0821
			US 1990-507348	A 1990 0409
			WO 1990-EP1362	A 1990 0818

AB Radio-derivatized polymers (RDPs) are produced by contacting nonpolymerizable conjugands (e.g. aromatic amines) with radiolysable

polymers in the presence of radiation. The resulting RDPs can be further linked with ligands for their immobilization. Depending on the type of conjugand used, the method produces functionalized or reactive RDPs. The RDPs have improved adsorptive and ion-binding characteristics, and can be used for cell/tissue culture substrates, chromatog. sorbents, immunoassays and other binding assays, etc. Thus, m-phenylene diamine was added to polystyrene microtiter plate wells which were then either irradiated with a ^{60}Co γ -source or, for controls, kept at room temperature for the same time as the irradiated plates. The % coupling of RNase to irradiated and nonirradiated material was 3.7 and 1.4%, resp. The binding of other proteins and other compds. of biol. interest to a variety of RDPs is presented, as is a binding assay for dinitrophenyl-specific IgE antibodies.

IT 9003-53-6D, Polystyrol, DL-2-amino-1-(4-hydroxyphenyl)-ethanol-1 radioderivs.
(acetic acid immobilization on, ethyldiethylaminopropyl carbodiimide-mediated)

RN 9003-53-6 HCAPLUS

CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5

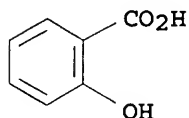
CMF C8 H8

$\text{H}_2\text{C}=\text{CH}-\text{Ph}$

IT 69-72-7, biological studies
(conjugand-radioderivatized polystyrene ethyldiethylaminopropyl carbodiimide-mediated uptake of)

RN 69-72-7 HCAPLUS

CN Benzoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)



IT 9003-53-6D, Polystyrene, conjugand radioderivatized
(for ligand immobilization)

RN 9003-53-6 HCAPLUS

CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5

CMF C8 H8

$\text{H}_2\text{C}=\text{CH}-\text{Ph}$

IC ICM C08J007-12

ICS C08J007-00; C07K017-06; C12N011-06; G01N033-543; C12Q001-68

CC 9-14 (Biochemical Methods)

Section cross-reference(s): 15, 16, 74

- IT Myosins
(immobilization of, on **aminophenol**-polystyrene radioderivatized polymer)
- IT 61-54-1D, Tryptamine, polystyrene radiolysis reaction products
91-59-8D, 2-Naphthalenamine, polystyrene radiolysis reaction products
95-54-5D, o-Phenylene diamine, polystyrene radiolysis reaction products
95-80-7D, polystyrene radiolysis reaction products
95-85-2D, 2-Amino-4-**chlorophenol**, polystyrene radiolysis reaction products
104-14-3D, polystyrene radiolysis reaction products
108-45-2D, m-Phenylenediamine, polystyrene radiolysis reaction products
118-92-3D, o-Aminobenzoic acid, polystyrene radiolysis reaction products
123-30-8D, p-**Aminophenol**, polystyrene radiolysis reaction products
134-32-7D, 1-Naphthylamine, polystyrene radiolysis reaction products
141-86-6D, 2,6-Diaminopyridine, polystyrene radiolysis reaction products
479-27-6D, 1,8-Naphthalenediamine, polystyrene radiolysis reaction products
938-25-0D, 1,2-Naphthalenediamine, polystyrene radiolysis reaction products
1445-39-2D, polystyrene radiolysis reaction products
19243-04-0D, polystyrene radiolysis reaction products
(Hb and RNase immobilization on)
- IT 9003-53-6D, Polystyrol, DL-2-amino-1-(4-hydroxyphenyl)-ethanol-1 radioderivs.
(acetic acid immobilization on, ethyldiethylaminopropyl carbodiimide-mediated)
- IT 1084-76-0 56-40-6, Glycine, biological studies 64-19-7, Acetic acid, biological studies 65-85-0, Benzoic acid, biological studies 69-72-7, biological studies
(conjugand-radioderivatized polystyrene ethyldiethylaminopropyl carbodiimide-mediated uptake of)
- IT 9003-53-6D, Polystyrene, conjugand radioderivatized (for ligand immobilization)
- IT 9001-75-6, Pepsin
(immobilization of, on **aminophenol**-polystyrene radioderivatized polymer)
- IT 2425-79-8, 1,4-Butanediol diglycidyl ether 25985-26-6 26471-62-5
(protein coupling to **aminophenol**-polystyrene radioderivatized polymer with)

L56 ANSWER 13 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1991:618938 HCAPLUS

DOCUMENT NUMBER: 115:218938

TITLE: Dispersing agent for color-developers for pressure-sensitive paper

INVENTOR(S): Shimada, Toshiro; Nishigaito, Yasushi

PATENT ASSIGNEE(S): Sanyo Chemical Industries Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 03065381	A2	19910320	JP 1989-203495	1989

0804

JP 2724412
PRIORITY APPLN. INFO.:

B2 19980309

JP 1989-203495

1989
0804

AB The title dispersing agent is made of a water-soluble or water-dispersible copolymer having structural units of a monomer containing a sulfonic acid (its salt) group and a hydrophobic vinyl monomer. The color developer dispersion using the agent shows good stability, and pressure-sensitive paper obtained therefrom exhibits good coloring properties. Thus, an aqueous dispersion containing Bu methacrylate-styrene copolymer Na sulfonate derivative and Zn salt of p-cyclohexylphenol-bisphenol A-phenol-formaldehyde copolymer was coated on a paper support to give a color developer sheet.

IT 80389-57-7 118821-59-3D, zincated
(color-developer, dispersed, pressure-sensitive copying paper using)

RN 80389-57-7 HCAPLUS

CN Formaldehyde, polymer with 4-cyclohexylphenol, 4,4'-(1-methylethylidene)bis[phenol] and phenol, zinc salt (9CI)
(CA INDEX NAME)

CM 1

CRN 80389-56-6

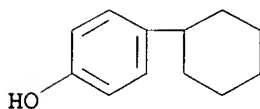
CMF (C15 H16 O2 . C12 H16 O . C6 H6 O . C H2 O)x

CCI PMS

CM 2

CRN 1131-60-8

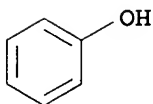
CMF C12 H16 O



CM 3

CRN 108-95-2

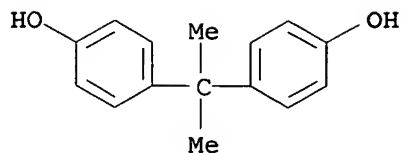
CMF C6 H6 O



CM 4

CRN 80-05-7

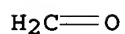
CMF C15 H16 O2



CM 5

CRN 50-00-0

CMF C H2 O



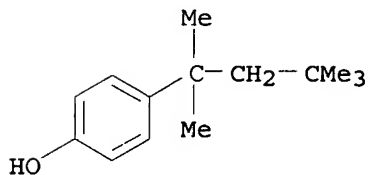
RN 118821-59-3 HCAPLUS

CN Benzoic acid, 2-hydroxy-, polymer with 4-(1,1,3,3-tetramethylbutyl)phenol and 1,3,5-trimethylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 140-66-9

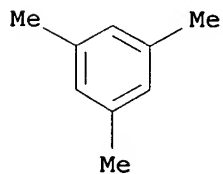
CMF C14 H22 O



CM 2

CRN 108-67-8

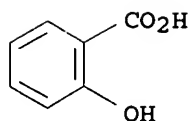
CMF C9 H12



CM 3

CRN 69-72-7

CMF C7 H6 O3

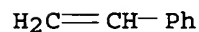


IT 25034-86-0D, Methyl methacrylate-styrene copolymer,
sulfonated, sodium salt 25213-39-2D, Butyl
methacrylate-styrene copolymer, sulfonated, sodium salt
32761-10-7D, Stearyl methacrylate-styrene copolymer,
sulfonated, sodium salt 37218-15-8D,
Styrene-vinyltoluene copolymer, sulfonated, sodium salt
(dispersing agent, for color-developer, for pressure-sensitive
copying paper)
RN 25034-86-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with
ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5

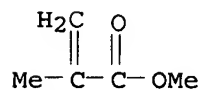
CMF C8 H8



CM 2

CRN 80-62-6

CMF C5 H8 O2

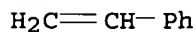


RN 25213-39-2 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5

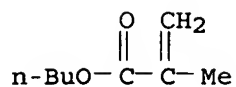
CMF C8 H8



CM 2

CRN 97-88-1

CMF C8 H14 O2



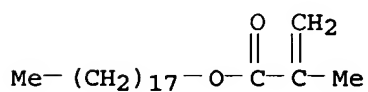
RN 32761-10-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7

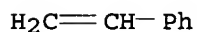
CMF C22 H42 O2



CM 2

CRN 100-42-5

CMF C8 H8



RN 37218-15-8 HCAPLUS

CN Benzene, ethenylmethyl-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

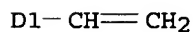
CRN 25013-15-4

CMF C9 H10

CCI IDS



D1-Me



CM 2

CRN 100-42-5

CMF C8 H8

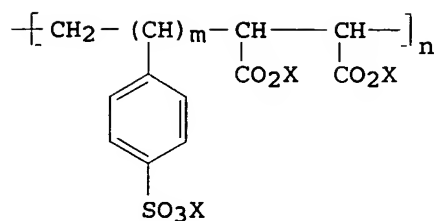
$\text{H}_2\text{C}=\text{CH}-\text{Ph}$

IC ICM B41M005-155
 CC 74-11 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 IT 7440-66-6D, Zinc, reaction product with mesitylene-p-tert-
 octylphenol-salicylic acid copolymer 66654-19-1
 80389-57-7 118821-59-3D, zincated
 (color-developer, dispersed, pressure-sensitive copying paper
 using)
 IT 25034-86-0D, Methyl methacrylate-styrene copolymer,
 sulfonated, sodium salt 25213-39-2D, Butyl
 methacrylate-styrene copolymer, sulfonated, sodium salt
 32761-10-7D, Stearyl methacrylate-styrene copolymer,
 sulfonated, sodium salt 37218-15-8D,
 Styrene-vinyltoluene copolymer, sulfonated, sodium salt
 51555-38-5 62857-58-3, Sodium styrenesulfonate-vinyl acetate
 copolymer 137013-27-5
 (dispersing agent, for color-developer, for pressure-sensitive
 copying paper)

L56 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1989:85596 HCAPLUS
 DOCUMENT NUMBER: 110:85596
 TITLE: Aqueous suspensions for pressure-sensitive
 copying paper
 INVENTOR(S): Asano, Makoto; Hasegawa, Kyoharu; Takagi,
 Masatoshi; Yamaguchi, Teruhiro; Yamaguchi,
 Keisaburo; Tanabe, Yoshimitsu
 PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 63170080	A2	19880713	JP 1987-1844	1987 0109
PRIORITY APPLN. INFO.:			JP 1987-1844	1987 0109

GI



AB The title suspensions are prepared by dispersion of polyvalent metal complexes of salicylic acid polycondensates in the presence of salts of sulfonated maleic acid-styrene copolymers I ($m = 1-5$; $n = 5-10000$; $X = \text{Na}, \text{K}, \text{Cs}, \text{Rb}, \text{NH}_4$). These suspensions are colorless, brightly white, stably stored at wide pH range unaffected by acids, alkalis, and polyvalent metals, do not thicken or foam during dispersion process, and do not discolor by storage. Thus, a mixture of p-tert-octylphenol 206, salicylic acid 46, and 35% HCHO 85.8 g was condensed in the presence of HCl, and the product was metalated by slow addition of a mixture of 30 g Zn dipropionate and 15 g NH_4HCO_3 . A mixture of 100 g the product, 20 g of a 20% solution of sulfonated 1:1 (mol) maleic acid-styrene copolymer, and H_2O was ground to obtain a suspension. A coating composition containing the suspension (18 parts solid), CaCO_3 100, a SBR latex 6, oxidized starch 6, and Na poly(acrylic acid) 0.5 part was applied on paper to obtain a developer sheet for a pressure copying system, which was used with a color former sheet containing crystal violet lactone. Described advantages were observed throughout the fabrication and the use of the material.

IT 25300-64-5D, Maleic acid-styrene copolymer, sulfonated, sodium salt
(dispersing agent, for suspension of polyvalent metal salts of salicylic acid condensates for preparation of developer sheets for pressure copying systems)

RN 25300-64-5 HCAPLUS

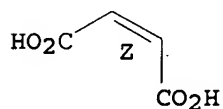
CN 2-Butenedioic acid (2Z)-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 110-16-7

CMF C4 H4 O4

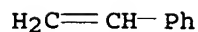
Double bond geometry as shown.



CM 2

CRN 100-42-5

CMF C8 H8



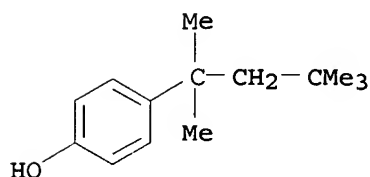
IT 118821-58-2D, zinc complex
 (suspension containing sulfonated maleic acid-styrene copolymer
 and, for preparation of developer sheet for pressure copying system)
 RN 118821-58-2 HCAPLUS
 CN Benzoic acid, 2-hydroxy-, polymer with formaldehyde and
 4-(1,1,3,3-tetramethylbutyl)phenol, zinc salt (9CI) (CA INDEX
 NAME)

CM 1

CRN 65733-75-7
 CMF (C14 H22 O . C7 H6 O3 . C H2 O)x
 CCI PMS

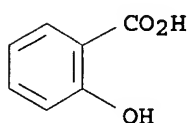
CM 2

CRN 140-66-9
 CMF C14 H22 O



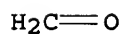
CM 3

CRN 69-72-7
 CMF C7 H6 O3



CM 4

CRN 50-00-0
 CMF C H2 O



IT 118821-60-6D, zinc complex 118928-51-1D, zinc
 complex
 (suspension containing sulfonated maleic acid-styrene copolymer
 and, for preparation of developer sheet for pressure copying system,
 stability of)
 RN 118821-60-6 HCAPLUS

CN Benzoic acid, 2-hydroxy-, polymer with 4-(1,1,3,3-tetramethylbutyl)phenol and 1,3,5-trimethylbenzene, zinc salt (9CI) (CA INDEX NAME)

CM 1

CRN 118821-59-3

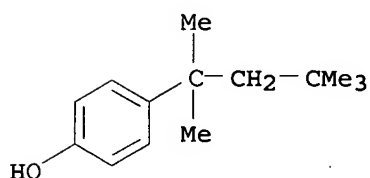
CMF (C14 H22 O . C9 H12 . C7 H6 O3)x

CCI PMS

CM 2

CRN 140-66-9

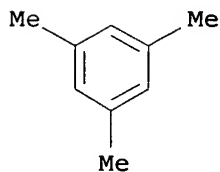
CMF C14 H22 O



CM 3

CRN 108-67-8

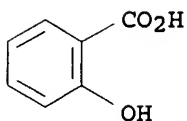
CMF C9 H12



CM 4

CRN 69-72-7

CMF C7 H6 O3



RN 118928-51-1 HCAPLUS

CN Benzoic acid, 2-hydroxy-, polymer with 1,3,5-trimethylbenzene, zinc salt (9CI) (CA INDEX NAME)

CM 1

CRN 118928-50-0

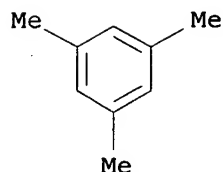
CMF (C9 H12 . C7 H6 O3)x

CCI PMS

CM 2

CRN 108-67-8

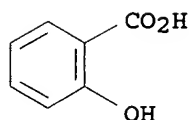
CMF C9 H12



CM 3

CRN 69-72-7

CMF C7 H6 O3



IC ICM B41M005-12

CC 74-11 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)IT 25300-64-5D, Maleic acid-styrene copolymer, sulfonated,
sodium salt(dispersing agent, for suspension of polyvalent metal salts of
salicylic acid condensates for preparation of developer sheets for
pressure copying systems)

IT 118821-58-2D, zinc complex

(suspension containing sulfonated maleic acid-styrene copolymer
and, for preparation of developer sheet for pressure copying system)IT 118821-60-6D, zinc complex 118928-51-1D, zinc
complex(suspension containing sulfonated maleic acid-styrene copolymer
and, for preparation of developer sheet for pressure copying system,
stability of)

L56 ANSWER 15 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1986:543495 HCAPLUS

DOCUMENT NUMBER: 105:143495

TITLE: Multicolor electrophotographic toners

INVENTOR(S): Ikeda, Itsuo

PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

JP 60233658

A2

19851120

JP 1984-90711

1984
0507

PRIORITY APPLN. INFO.:

JP 1984-90711

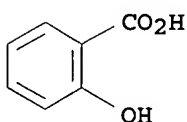
1984
0507

AB The title toners contain, as main constituents, (1) a coloring dye which transmits selectively 1 color light of 3 primaries based on additive mixture method; (2) a decoloring promoter for the coloring dye; (3) a colorless dye which gives the additive complementary color for the coloring dye, (4) a color coformer for the colorless dye, and (5) a binder. The toners are especially useful in one-shot color electrophotog. process and can use common paper as image-receiving paper, giving color images with good preservability. Thus, a composition containing a blue dye powder prepared from 3-methylbenzo- β -naphthospiropyran and a novolak phenolic resin, stearic acid monoglyceride, and poly(vinyl alc.) was spray-dried and the resulting core substance was coated with a composition containing N-2,4,5-trichlorophenylleucoauramine, 4,4'-(1-methylhexylidene)diphenol, and polystyrene to give blue toner for yellow color, while a green toner for magenta color and red toner for cyan color were prepared by the same manner using 3'-diethylamino-5'-methoxy-7'-dinaphthylaminofluoran and Rhodamine B lactam and 3'-diethylamino-6'-methyl-7'-dibenzylaminofluoran and N-bis(4-dimethylaminophenyl)methyl- β -hydroxyethyl-aniline, resp. The 3 color toners were mixed with each other and used in an one-shot color electrophotog. process using a panchromatic electrophotog. photoreceptor to give clear color images.

IT 69-72-7, uses and miscellaneous 9003-53-6
(color toner coating layer containing, for electrophotog. developers for multicolor image formation by 1-shot color process)

RN 69-72-7 HCAPLUS

CN Benzoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)



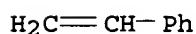
RN 9003-53-6 HCAPLUS

CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5

CMF C8 H8



IC ICM G03G009-08

ICS G03G015-01

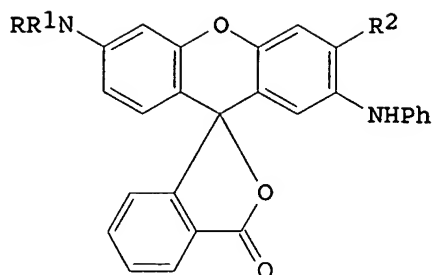
CC 74-3 (Radiation Chemistry, Photochemistry, and

Photographic and Other Reprographic Processes)
 IT 69-72-7, uses and miscellaneous 92-84-2
 9003-53-6 21121-62-0 24460-10-4 26206-78-0
 41709-94-8 78132-96-4
 (color toner coating layer containing, for electrophotog.
 developers for multicolor image formation by 1-shot color
 process)

L56 ANSWER 16 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1983:622486 HCAPLUS
 DOCUMENT NUMBER: 99:222486
 TITLE: Heat-sensitive recording materials
 INVENTOR(S): Taniguchi, Keishi; Iwata, Susumu; Sakamoto,
 Hiroshi
 PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan
 SOURCE: Ger. Offen., 28 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
DE 3245660	A1	19830623	DE 1982-3245660	1982 1209
DE 3245660	C2	19840223		
JP 58098286	A2	19830611	JP 1981-197923	1981 1209
US 4486763	A	19841204	US 1982-446086	1982 1201
FR 2517599	A1	19830610	FR 1982-20655	1982 1209
FR 2517599	B1	19840713		
GB 2112161	A1	19830713	GB 1982-35198	1982 1209
GB 2112161	B2	19850724		
PRIORITY APPLN. INFO.:			JP 1981-197923	A 1981 1209

GI

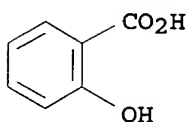


AB Heat-sensitive recording materials giving high d. images in a high-speed recording process, showing no discoloration upon rubbing or application of pressure, having a good storage stability, and showing essentially no dust buildup on the thermal head during recording contain a colorless or slightly colored fluoran (I; R = C5-8 alkyl; R1 = C1-8 alkyl; R2 = C1-2 alkyl), an acid material as developer, and a benzamide derivative. Thus, a mixture containing 1 part of a ball-milled dispersion containing 3-methyl-n-amylamino-6-methyl-7-anilino-fluoran 20, 10% aqueous hydroxyethylcellulose 20, and water 60 parts, 4 parts of a ball-milled dispersion containing 2,2'-bis(4-hydroxyphenyl)propane 20, 10% aqueous hydroxyethylcellulose 20, and water 20 parts, 2 parts of a ball-milled dispersion containing N-dodecylbenzamide 20 and 5% aqueous methylcellulose 60 parts, and 2 parts 20% aqueous poly(vinyl alc.) was coated on a paper sheet (60 g/m²) at 6.0 g/m² dry and then recorded on in a RIFAX-3300 facsimile apparatus to give an image d. of 1.20. When recorded on for 24 h, no dust was observed on the thermal head and clear images were still obtainable.

IT 69-72-7, uses and miscellaneous 9003-53-6
(thermal recording materials with heat-sensitive layer containing benzamide derivative and fluoran derivative and)

RN 69-72-7 HCAPLUS

CN Benzoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)



RN 9003-53-6 HCAPLUS

CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5

CMF C8 H8

H₂C=CH-Ph

IC B41M005-18

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 27

- IT Acids, uses and miscellaneous
 Acrylic polymers, uses and miscellaneous
 Phenols, uses and miscellaneous
 (thermal recording materials with heat-sensitive layer containing benzamide derivative and fluoran derivative and)
- IT 50-85-1 57-11-4, uses and miscellaneous 65-85-0, uses and miscellaneous 69-72-7, uses and miscellaneous 77-40-7
 77-92-9, uses and miscellaneous 79-96-9 80-05-7, uses and miscellaneous 83-30-7 86-48-6 87-66-1 87-69-4, uses and miscellaneous 89-83-8 90-15-3 98-54-4 99-06-9, uses and miscellaneous 99-76-3 99-93-4 108-46-3, uses and miscellaneous 108-68-9 108-73-6 110-15-6, uses and miscellaneous 110-16-7, uses and miscellaneous 119-47-1
 120-80-9, uses and miscellaneous 123-31-9, uses and miscellaneous 135-19-3, uses and miscellaneous 144-62-7, uses and miscellaneous 149-91-7, uses and miscellaneous 471-34-1, uses and miscellaneous 637-12-7 1139-46-4 1309-48-4, uses and miscellaneous 1344-28-1, uses and miscellaneous 1806-29-7
 7631-86-9, uses and miscellaneous 7727-43-7 7790-93-4
 9002-89-5 9003-22-9 9003-53-6 9003-63-8 9004-62-0
 9004-67-5 9011-05-6 14807-96-6, uses and miscellaneous
 (thermal recording materials with heat-sensitive layer containing benzamide derivative and fluoran derivative and)

L56 ANSWER 17 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1983:134200 HCAPLUS

DOCUMENT NUMBER: 98:134200

TITLE: Voltammetric studies using a Hyamine 2389-polystyrene-filmed electrode

AUTHOR(S): Franklin, Thomas C.; Ohta, Masahiro

CORPORATE SOURCE: Chem. Dep., Baylor Univ., Waco, TX, 76798, USA

SOURCE: Surface Technology (1983), 18(1), 63-76

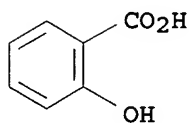
CODEN: SUTED8; ISSN: 0376-4583

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The effect was studied of the surfactant Hyamine 2389 (predominantly methyl dodecyl benzyl trimethyl ammonium chloride) on the electrooxidn. of organic compds. when the Hyamine was immobilized on the electrode in a polymeric film. Cyclic voltammetric measurements showed that the Hyamine mols. in the film adjacent to the electrode could be reorganized by sweeping the potential in the cathodic direction past a desorption peak. The O evolution potential on Pt in aqueous NaOH increased from 0.7 V with no additive present and 1.7 V with Hyamine present in solution to 2.0 V in the presence of the immobilized hydrophobic film. The polystyrene-Hyamine-filmed electrode was more convenient to use than Hyamine in solution in that the residual current was very low and the electrode was so stable that it could be moved to other solns. and be used in acid systems. Both soluble and insol. substances could be oxidized on the electrode. Insol. substances apparently adhere to the tacky polymer electrode. The oxidation of compds. such as p-bromophenol forms insol. passive films which can be removed by introducing solubilizing Hyamine micelles into the system. Although the oxidation potentials indicate that a number of compds. in the base are oxidized by a mediated mechanism involving chemical oxidation of the compds. by electrochem. oxidized Hyamine, the number of compds. in basic solns. and the inorg. compds. in acidic solns. were indicated to be oxidized by an electron transfer mechanism.

IT 69-72-7, reactions
 (oxidation of, electrochem., on platinum with polystyrene film
 containing Hyamine 2389)
 RN 69-72-7 HCAPLUS
 CN Benzoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)



IT 9003-53-6
 (platinum electrode with Hyamine 2389-containing film of,
 voltammetric studies using)
 RN 9003-53-6 HCAPLUS
 CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 100-42-5
 CMF C8 H8

$\text{H}_2\text{C}=\text{CH}-\text{Ph}$

CC 72-2 (Electrochemistry)
 Section cross-reference(s): 22
 IT 62-56-6, reactions 63-74-1 65-85-0, reactions 69-72-7
 , reactions 73-24-5, reactions 76-93-7, reactions 88-65-3
 90-64-2 91-01-0 95-54-5, reactions 95-82-9 97-02-9
 98-92-0 99-04-7 99-94-5 99-96-7, reactions 100-09-4
 100-10-7 100-21-0, reactions 106-41-2 118-90-1 118-92-3
 140-10-3, reactions 150-13-0 555-16-8, reactions 579-75-9
 586-76-5 589-18-4 619-73-8 7647-15-6, reactions 7681-82-5,
 reactions 7772-99-8, reactions
 (oxidation of, electrochem., on platinum with polystyrene film
 containing Hyamine 2389)
 IT 9003-53-6
 (platinum electrode with Hyamine 2389-containing film of,
 voltammetric studies using)

L56 ANSWER 18 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1982:208440 HCAPLUS
 DOCUMENT NUMBER: 96:208440
 TITLE: Heat-sensitive recording material
 INVENTOR(S): Kubo, Keishi; Kawamura, Eiichi
 PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan
 SOURCE: Ger. Offen., 41 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----

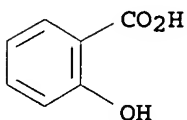
DE 3119053	A1	19820211	DE 1981-3119053	1981 0513
DE 3119053	C2	19830721		
JP 56169087	A2	19811225	JP 1980-62312	1980 0513
JP 58034313	B4	19830726		
JP 57008193	A2	19820116	JP 1980-82167	1980 0619
JP 58034316	B4	19830726		
PRIORITY APPLN. INFO.:			JP 1980-62312	A 1980 0513
			JP 1980-82167	A 1980 0619

AB Heat-sensitive recording materials are described which produce high d. images with a sharp contrast with the application of only a relatively low amount of energy. These materials consist of a support coated with a heat-sensitive layer containing a colorless or only slightly colored leuco dye, an acid, and an amide. The addition of a dialkyl 4,5-epoxycyclohexane-1,2-dicarboxylate to the heat-sensitive layer improves the resistance of the layer to pressure or rubbing. Thus, a high quality paper sheet was drawbar coated with a heat-sensitive dispersion prepared by mixing a dispersion containing 3-pyrrolidino-6-methyl-7-anilino-fluoran 5.7, 10% aqueous poly(vinyl alc.) 25.0, and water 19.8 parts and a dispersion containing Bisphenol A 21.0, hydroxyethyl cellulose 2.7, N-cyclohexylstearamide 8.0, and water 18.3 parts at 5.6 g/m², dried, and imaged in a thermoprinter with a thermal printing head operating at 110° (1.03 mJ at 14 V) to give a clear image with a d. of 0.8.

IT 69-72-7, uses and miscellaneous
(heat-sensitive recording composition containing amide and, for improved image d. and contrast)

RN 69-72-7 HCAPLUS

CN Benzoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)



IT 9003-53-6
(heat-sensitive recording compns. containing amide and, for improved image d. and contrast)

RN 9003-53-6 HCAPLUS

CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5

CMF C8 H8

H₂C=CH-Ph

IC B41M005-26
 CC 74-7 (Radiation Chemistry, **Photochemistry**, and
Photographic and Other Reprographic Processes)
 IT Acrylic polymers, uses and miscellaneous
 Alkanes, uses and miscellaneous
 Gelatins, uses and miscellaneous
 Linseed oil
 Paraffin waxes and Hydrocarbon waxes, uses and miscellaneous
Phenols, uses and miscellaneous
 Tung oil
 (heat-sensitive recording compns. containing amide and, for
 improved image d. and contrast)
 IT 50-85-1 57-11-4, uses and miscellaneous 65-85-0, uses and
 miscellaneous 69-72-7, uses and miscellaneous 77-92-9,
 uses and miscellaneous 86-48-6 87-69-4, uses and miscellaneous
 99-06-9, uses and miscellaneous 110-15-6, uses and miscellaneous
 110-16-7, uses and miscellaneous 144-62-7, uses and
 miscellaneous 149-91-7, uses and miscellaneous 10043-35-3
 (heat-sensitive recording composition containing amide and, for improved
 image d. and contrast)
 IT 77-40-7 79-96-9 80-05-7, uses and miscellaneous 83-30-7
 87-66-1 89-83-8 90-15-3 98-54-4 99-76-3 99-93-4
 108-46-3, uses and miscellaneous 108-68-9 108-73-6 119-47-1
 120-80-9, uses and miscellaneous 123-31-9, uses and
 miscellaneous 135-19-3, uses and miscellaneous 471-34-1, uses
 and miscellaneous 1139-46-4 1309-48-4, uses and miscellaneous
 1344-28-1, uses and miscellaneous 1806-29-7 7631-86-9, uses
 and miscellaneous 7727-43-7 9002-89-5 9003-01-4 9003-05-8
 9003-22-9 9003-39-8 9003-53-6 9003-63-8 9004-32-4
 9004-62-0 9004-67-5 9005-25-8, uses and miscellaneous
 14807-96-6, uses and miscellaneous 20217-26-9, uses and
 miscellaneous 55772-72-0
 (heat-sensitive recording compns. containing amide and, for
 improved image d. and contrast)

L56 ANSWER 19 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1975:594293 HCAPLUS
 DOCUMENT NUMBER: 83:194293
 TITLE: Surface treatment of oxide particles
 INVENTOR(S): Yanazawa, Hiroshi; Ashikawa, Mikio; Hashimoto,
 Norikazu
 PATENT ASSIGNEE(S): Hitachi, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 50018396	A2	19750226	JP 1973-69786	1973 0622

PRIORITY APPLN. INFO.: JP 1973-69786 A

1973
0622

AB Affinity of oxide particles for organic compds. and polymers was improved by treating oxide with solns. containing both alc. and phenol derivative For example, silica [7631-86-9] was autoclaved with a mixture of 10 g phenol [108-95-2], 13 ml n-octanol [111-87-5], and 60 ml n-hexane at 255° and 30 atm for 30 min to give a product with good dispersibility in polystyrene [9003-53-6] and phenolic novolak. Similarly titanium dioxide [13463-67-7] was treated with butanol [71-36-3] and salicylic acid [69-72-7].

IT 9003-53-6

(alc.- and phenol- treated silica and titanium dioxide fillers with improved dispersibility in)

RN 9003-53-6 HCAPLUS

CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5

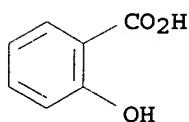
CMF C8 H8

 $\text{H}_2\text{C}=\text{CH}-\text{Ph}$

IT 69-72-7D, Benzoic acid, 2-hydroxy-, reaction products with titanium dioxide and butanol
(fillers, with improved dispersibility, in polystyrene and phenolic resins)

RN 69-72-7 HCAPLUS

CN Benzoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)



INCL 15F0; 15F13; 15F26; 15F24

CC 36-2 (Plastics Manufacture and Processing)

IT 9003-53-6

(alc.- and phenol- treated silica and titanium dioxide fillers with improved dispersibility in)

IT 69-72-7D, Benzoic acid, 2-hydroxy-, reaction products with titanium dioxide and butanol 71-36-3D, 1-Butanol, reaction products with titanium dioxide and salicylic acid 108-95-2D, Phenol, reaction products with silica and octanol 111-87-5D, 1-Octanol, reaction products with silica and phenol 7631-86-9D, Silica, reaction products with phenol and octanol 13463-67-7D, Titanium oxide (TiO_2), reaction products with butanol and salicylic acid
(fillers, with improved dispersibility, in polystyrene and phenolic resins)

L56 ANSWER 20 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1975:105233 HCAPLUS

DOCUMENT NUMBER: 82:105233

TITLE: Receptor sheets for pressure-sensitive copy papers
 INVENTOR(S): Oda, Shiniehi; Saito, Toranosuke; Hohno, Jujiro; Tanaka, Daichiro
 PATENT ASSIGNEE(S): Sanko Chemical Co., Ltd.; Kanzaki Paper Mfg. Co., Ltd.
 SOURCE: Fr., 41 pp.
 CODEN: FRXXAK
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
FR 2200785	A5	19740419	FR 1973-34359	1973 0925
JP 49050484	A2	19740516	JP 1972-94730	1972 0920
JP 52009304	B4	19770315	JP 1972-94730	A 1972 0927

PRIORITY APPLN. INFO.:
 A

AB To obtain copies of superior mech., thermal, and humidity stability on contact with sheets carrying microencapsulated leuco compds., the >2 g/m² coatings contain an aromatic o-hydroxycarboxylic acid, preferably with ≥17 C atoms, or a polyvalent metal salt thereof, with 15-300% of a compatible polymer, having a mol. weight of >400, and 5-1000% of a mineral pigment, such as kaolin, Al silicate, or SiO₂. Acid and polymer may be mixed in the fused, solvent, or aqueous latex state, or acid and a vinyl monomer may be copolymerized. Thus, polystyrene (mol. weight of .apprx.1000) 100 parts, Al 5-cyclohexyl-3-(α,α-dimethylbenzyl)salicylate 50, and kaolin 300 parts were fused at 180°, ground, and ballmilled for 20 hr in 520 parts of 20% aqueous poly(vinyl alc.). After mixing with a 50% solids styrene-butadiene copolymer latex 20 parts the coating was applied to 50 g/m² paper at 10 g dry weight) per m².

IT 9003-53-6 25820-85-3
 (binder, for pressure-sensitive copying receptor sheets containing salicylic acid derivs. and mineral pigments)

RN 9003-53-6 HCAPLUS

CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5

CMF C8 H8

H₂C=CH-Ph

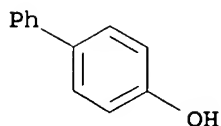
RN 25820-85-3 HCAPLUS

CN Formaldehyde, polymer with [1,1'-biphenyl]-4-ol (9CI) (CA INDEX NAME)

CM 1

CRN 92-69-3

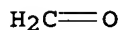
CMF C12 H10 O



CM 2

CRN 50-00-0

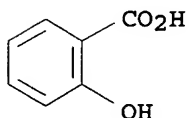
CMF C H2 O



IT 69-72-7, uses and miscellaneous
(pressure-sensitive copying receptors sheets containing mineral
pigments and)

RN 69-72-7 HCAPLUS

CN Benzoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)



IC B41M

CC 74-8 (Radiation Chemistry, Photochemistry, and Photographic
Processes)

IT 9003-22-9 9003-53-6 9003-54-7 9003-55-8 9011-11-4

25014-31-7 25119-62-4 25820-85-3 26634-88-8

26810-06-0

(binder, for pressure-sensitive copying receptor sheets containing
salicylic acid derivs. and mineral pigments)

IT 69-72-7, uses and miscellaneous 16283-36-6 41699-26-7

41699-32-5 41699-33-6 53721-15-6 53721-16-7 53769-91-8

53769-92-9 53769-93-0 53822-90-5 53822-91-6 53822-92-7

53822-93-8

(pressure-sensitive copying receptors sheets containing mineral
pigments and)

L56 ANSWER 21 OF 21 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1966:401289 HCAPLUS

DOCUMENT NUMBER: 65:1289

ORIGINAL REFERENCE NO.: 65:210b-c

TITLE: Copy paper

PATENT ASSIGNEE(S): Etablissement Consulting

SOURCE: 8 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

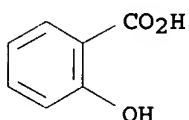
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1014392		19651222	GB	
DE 1218476			DE	
PRIORITY APPLN. INFO.:			IT	
				1960
				1223

AB Copy papers are described comprising a carrier sheet with a donor layer on one face and an acceptor layer on the other. The donor layer contains a binding agent, plasticizer, inorg. filler, pigment, and organic fixative, and the acceptor layer a binding agent and plasticizer. A solution for a donor layer is prepared in a ball mill from 4 parts poly(vinyl acetate) (mol. weight 60,000) and 2 parts gallic acid in 44 parts of 94% EtOH. A paste is prepared in a 3-roller mill from C black 20, di-Bu phthalate 5, castor oil 15, CaSO₄ 20, ZnO 10, ethylene glycol mono-Me ether 15, and BuOH 15%. The paste is dispersed in the solution in the proportion of 1:1. This mass is applied to a carrier sheet of paper, as in the production of C paper, to which it fixes itself on drying. An acceptor layer is prepared by stirring 39% H₂O and 40% of 94% EtOH in turn into 1% Na lauryl sulfate and 20% of a 50% emulsion polymerization product of 70 parts by weight Me methacrylate with 30 parts Bu acrylate. The composition is applied to a carrier sheet and evaporated

IT 69-72-7, Salicylic acid
 (copying paper (pressure-sensitive) containing binding agent, pigment and)

RN 69-72-7 HCAPLUS

CN Benzoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)



IT 9003-53-6, Styrene polymers
 (copying paper (pressure-sensitive) containing pigment, organic fixatives and pressure-sensitive)

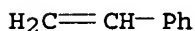
RN 9003-53-6 HCAPLUS

CN Benzene, ethenyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5

CMF C8 H8



IC B41M; D21H

CC 11 (Radiation Chemistry and Photochemistry)

IT 82-64-4, Resorcinol, 2,4-dibenzoyl- 85-19-8, Benzophenone,

5-chloro-2-hydroxy- 87-66-1, Pyrogallol 118-55-8, Salicylic
acid, phenyl ester 149-91-7, Gallic acid 536-08-3, Gallic
acid, 3-gallate 10555-79-0, Phenol, p-butyl-,
salicylate
(copying paper (pressure-sensitive) containing binding agent and)
IT 65-85-0, Benzoic acid 69-72-7, Salicylic acid 88-99-3,
Phthalic acid 108-95-2, Phenol
(copying paper (pressure-sensitive) containing binding agent,
pigment and)
IT 9003-53-6, Styrene polymers
(copying paper (pressure-sensitive) containing pigment, organic
fixatives and pressure-sensitive)